BANASTHALI VIDYAPITH

Bachelor of Arts

Curriculum Structure

First Semester Examination, December, 2020
Second Semester Examination, April/May, 2021
Third Semester Examination, December, 2021
Fourth Semester Examination, April/May, 2022
Fifth Semester Examination, December, 2022
Sixth Semester Examination, April/May, 2023

BANASTHALI VIDYAPITH
P.O. BANASTHALI VIDYAPITH
(Rajasthan)-304022

July, 2020

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No. F. 9-6/81-U.3

**Government of India
Ministry of Education and Culture
(Department of Education)**

New Delhi, the 25th October, 1983

N O T I F I C A T I O N

In exercise of the powers conferred by Section 3 of the University Grants Commission Act, 1956 (3 of 1956) the Central Government, on the advice of the Commission, hereby declare that Banasthali Vidyapith, P. O. Banasthali Vidyapith, (Rajasthan) shall be deemed to be a University for the purpose of the aforesaid Act.

Sd/-
(M. R. Kolhatkar)
Joint Secretary of the Government of India

N O T I C E

Changes in Bye-laws/Syllabi and Books may from time to time be made by amendment or remaking, and a Candidate shall, except in so far as the Vidyapith determines otherwise, comply with any change that applies to years she has not completed at the time of change.

Contents

Programme Educational Objectives

The programme consists of Discipline/Core courses, and Foundation courses. The core courses include Applied Statistics, Computer Applications, Dramatic Art (Theatre), Drawing and Painting, Economics, English Literature, Geography, Hindi Literature, History, Home Science, Indian Classical Dance (Kathak), Indian Music, Management, Mathematics, Physical Education, Political Science, Psychology, Public Administration, , Sanskrit, Sociology, Statistics, and Textile Designing. The Foundation courses are of two types-core and elective. These courses are designed in such a way that they help students in achieving their holistic personality.

The comprehensive *Panchmukhi Shiksha* or Five-fold Education model of Banasthali Vidyapith includes physical, intellectual, moral, professional and aesthetic dimensions of human existence. It intends to dissolve all seeming binaries of life so that the students of Vidyapith can nurture a harmonious and holistic personality. It also develops a sense of ethical behavior, nationalism, appreciating Indian culture and ethos.

The main objectives of the programme are:

- To acquaint students with complex textures of Indian culture and ethos.
- To develop students' wide understanding of and on the major concepts, thoughts, and ideas of Applied Statistics, Computer Applications, Dramatic Art (Theatre), Drawing and Painting, Economics, English Literature, Geography, Hindi Literature, History, Home Science, Indian Classical Dance (Kathak), Indian Music, Management, Mathematics, Physical Education, Political Science, Psychology, Public Administration, Sanskrit, Sociology, Statistics, and Textile Designing.
- To hone students' critical, creative, liberal, innovative, and scientific thinking.
- To engage students in self-reflexivity and lifelong learning.
- To help students in integrating different aspects of physical, practical, aesthetic, moral and intellectual dimensions of educations to develop a holistic personality of each student.
- To nurture an effective citizen with a strong value base and ethics.
- To familiarize students with environmental contexts, inclusivity. And sustainable development.

Programme Outcomes

PO1: **Enrichment of Intellectual and Epistemic Tradition**: The programme develops students' wide understanding of and on the major concepts, thoughts, and ideas of Applied Statistics, Computer Applications, Dramatic Art (Theatre), Drawing and Painting, Economics, English Literature, Geography, Hindi Literature, History, Home Science, Indian Classical Dance (Kathak), Indian Music, Management, Mathematics, Physical Education, Political Science, Psychology, Public Administration, , Sanskrit, Sociology, Statistics, and Textile Designing. It also enriches their analytical, critical, creative faculties.

PO2: **Inculcation of Planning Abilities**: The programme hones effective planning abilities including time management, resource management, delegation skills and organizational skills of students which may develop their leadership qualities. It also prepares students for implementing plans, organizing several cultural and academic activities, coordinating to meet deadlines.

PO3: **Amelioration of Problem Solving Skills**: The programme prepares students to contextualize and to rationalize the principles of scientific enquiry, theoretical and philosophical thoughts, analytical and creative thinking for solving problems and making decision in the socio-pragmatic realities of life. These problem solving skills are instrumental in finding, analyzing, evaluating and applying information systematically so that judicious decision could be made.

PO4: **Appropriate Application of Methodological Tools**: The programme makes a candid attempt of familiarizing students with some relevant methodological tools which help them exploring the underlying ideas, thoughts, concepts and meanings in the available discourses of law, humanities, social sciences, art and aesthetics etc. A text is embedded into a rich cultural, social, pragmatic, and political realities and the apposite application of those methodological tools may unravel the textual and contextual richness.

PO5: **Development of Leadership and Soft Skills:** Human beings while negotiating with the socio-pragmatic realities face umpteen numbers of challenges which are related to human reactions, motivation, leadership, conflict resolution and team building. All these problems can be responded and resolved with the development of soft skills and the designed programme indeed aims to resolve them.

PO5: **Formation of Professional Identity:** Education intends to develop not only the intellectual and epistemological textures of the inhabitants of the synchronic society but it also hones professionalism among the denizens. Education of the globalized as well as glocalized era focuses on the formation of professional identity among professionals. Thus, the programme intends to develop professional identity among students.

PO6: **Nurturing Ethics and *Dharma*:** The vying competitiveness has developed a great sense of individuality, utilitarianism, and material competitiveness among students. They have impelled the people to ignore honesty, empathy, integrity, and ethical principles and therefore, people are not able to make any ethical interventions. The programme therefore intends to nurture ethics and *dharma* among the denizens of the world.

PO7: **Developing Communicative Competence**: The programme intends to develop grammatical and communicative competence among students and make them aware of the nature, form and function of language. Language is not merely a medium to communicate but is more fundamental to the process of the formation of ideas, thoughts and concepts. The programme therefore nurtures listening, writing, speaking and reading skills of students which allow them to communicate effectively in textual, personal and interpersonal contexts so that the discursive practices may be enriched and the trajectory of knowledge may get strengthened.

PO8:   **The knowledge, knower and Society**: The programme disseminates the fact the conception and distribution of knowledge in any form seems meaningless unless it is seen functioning in a society which is defined by the existence of human beings. The benefit of the common mass is always at the centre of all social, cultural, political, technological, and scientific innovations. Thus, the programme intends to integrate knowledge, knower or the human beings and society so that a sustainable society can be developed.

PO9:   **Environment and Sustainability**: The unprecedented growth and development in the world on industry, technology, trade and commerce etc have damaged the balance between nature and culture, Environment, ecology and all natural resources have been exploited to such a level that many of them are exhausted. Looking at these miserable conditions, the programme intends to prepare students to respond to some major issues of environment and sustainability.

PO10:   **Lifelong Learning**: A culture is inseparably intertwined into the complexes of its intellectual tradition or the systems of knowledge. The intellectual tradition remains alive when the people communicate and engage themselves with some discursive practices. These practices help one in the identification of some thrust areas on the basis of self-criticality and reflexivity that keep the process of lifelong learning alive and unseasonable. Thus, the programme develops a strong urge among students to strive on the path of lifelong learning.

Curriculum Structure
Bachelor of Arts
First Year

Semester - I

Course Code		Course Name	L	T	P	C*
BVF	011/	General English/सामान्य हिन्दी	2	0	0	2
BVF	014					
		Core Foundation Course - I	2	0	0	2
		Discipline 1 – Core Course - 1	4	0	0	4
		Discipline 1 – Core Course - 2	4	0	0	4
		Discipline 2 – Core Course - 1	4	0	0	4
		Discipline 2 – Core Course - 2	4	0	0	4
		Discipline 3 – Core Course - 1	4	0	0	4
		Discipline 3 – Core Course - 2	4	0	0	4
		Semester Total:	**28**	**0**	**0**	**28**

Semester - II

Course Code		Course Name	L	T	P	C*
BVF	014/	सामान्य हिन्दी/General English	2	0	0	2
BVF	011					
		Core Foundation Course - II	2	0	0	2
		Discipline 1 – Core Course - 3	4	0	0	4
		Discipline 1 – Core Course - 4	4	0	0	4
		Discipline 2 – Core Course - 3	4	0	0	4
		Discipline 2 – Core Course - 4	4	0	0	4
		Discipline 3 – Core Course - 3	4	0	0	4
		Discipline 3 – Core Course - 4	4	0	0	4
		Semester Total:	**28**	**0**	**0**	**28**

Second Year

Semester - III

Course Code	Course Name	L	T	P	C*
	Core Foundation Course - III	2	0	0	2
	Elective Foundation Course - I	2	0	0	2
	Discipline 1 – Core Course - 5	4	0	0	4
	Discipline 1 – Core Course - 6	4	0	0	4
	Discipline 2 – Core Course - 5	4	0	0	4
	Discipline 2 – Core Course - 6	4	0	0	4
	Discipline 3 – Core Course - 5	4	0	0	4
	Discipline 3 – Core Course - 6	4	0	0	4
	Semester Total:	**28**	**0**	**0**	**28**

Semester - IV

Course Code	Course Name	L	T	P	C*
	Core Foundation Course - IV	2	0	0	2
	Elective Foundation Course - II	2	0	0	2
	Discipline 1 – Core Course - 7	4	0	0	4
	Discipline 1 – Core Course - 8	4	0	0	4
	Discipline 2 – Core Course - 7	4	0	0	4
	Discipline 2 – Core Course - 8	4	0	0	4
	Discipline 3 – Core Course - 7	4	0	0	4
	Discipline 3 – Core Course - 8	4	0	0	4
	Semester Total:	**28**	**0**	**0**	**28**

Third Year

Semester - V

Course Code	Course Name	L	T	P	C
	Vocational Course - I	2	0	0	2
	Core Foundation Course - V/ Elective Foundation Course - III	2	0	0	2
	Discipline 1 – Core Course - 09	4	0	0	4
	Discipline 1 – Elective Course - 1	4	0	0	4
	Discipline 2 – Core Course - 09	4	0	0	4
	Discipline 2 – Elective Course - 1	4	0	0	4
	Discipline 3 – Core Course - 09	4	0	0	4
	Discipline 3 – Elective Course - 1	4	0	0	4
	Semester Total:	**28**	**0**	**0**	**28**

Semester - VI

Course Code	Course Name	L	T	P	C*
	Vocational Course - II	2	0	0	2
	Elective Foundation Course - III/ Core Foundation Course - V	2	0	0	2
	Discipline 1 – Core Course - 11	4	0	0	4
	Discipline 1 – Elective Course - 2	4	0	0	4
	Discipline 2 – Core Course - 11	4	0	0	4
	Discipline 2 – Elective Course - 2	4	0	0	4
	Discipline 3 – Core Course - 11	4	0	0	4
	Discipline 3 – Elective Course - 2	4	0	0	4
	Semester Total:	**28**	**0**	**0**	**28**

Course	Code	Course Name	L	T	P	C*
Applied Statistics						
Semester - I						
MATH	102	Basic Mathematics	4	0	0	4
STAT	101	Basic Statistics	4	0	0	4
Semester - II						
STAT	107	Statistical Methods	6	0	0	6
STAT	107L	Statistical Methods Lab	0	0	4	2
Semester - III						
STAT	205	Probability Distributions and Numerical Analysis	6	0	0	6
STAT	205L	Probability Distributions and Numerical Analysis Lab	0	0	4	2
Semester - IV						
STAT	202	Inferential Statistics and Quality Control	6	0	0	6
STAT	202L	Inferential Statistics and Quality Control Lab	0	0	4	2
Semester - V						
		Discipline Elective - I	6	0	4	8
Semester - VI						
		Discipline Elective - II	6	0	4	8
List of Discipline Elective						
STAT	302	Sampling Techniques and Design of Experiments	6	0	0	6
STAT	302L	Sampling Techniques and Design of Experiments Lab	0	0	4	2
STAT	301	Applied Statistics	6	0	0	6
STAT	301L	Applied Statistics Lab	0	0	4	2
STAT	303	Financial Statistics	6	0	0	6
STAT	303L	Financial Statistics Lab	0	0	4	2
STAT	304	Health Statistics and Population Dynamics	6	0	0	6
STAT	304L	Health Statistics and Population Dynamics Lab	0	0	4	2

Computer Applications

Semester - I

CS	106	Computer Fundamentals	4	0	0	4
MATH	105	Elements of Mathematics	4	0	0	4

Semester - II

CS	110	Computer Programming	6	0	0	6
CS	110L	Computer Programming Lab	0	0	4	2

Semester - III

CS	210	Data Structures	6	0	0	6
CS	210L	Data Structures Lab	0	0	4	2

Semester - IV

CS	201	Application Software and Visual Computing	6	0	0	6
CS	201L	Application Software and Visual Computing Lab	0	0	4	2

Semester - V

		Discipline Elective - I	6	0	4	8

Semester - VI

		Discipline Elective - II	6	0	4	8

List of Discipline Elective

CS	303	Database Management Systems	6	0	0	6
CS	303L	Database Management Systems Lab	0	0	4	2
CS	320	Programming in Java	6	0	0	6
CS	320L	Programming in Java Lab	0	0	4	2
CS	307	Multimedia and Web Designing	6	0	0	6
CS	306L	Multimedia and Web Designing Lab	0	0	4	2
CS	323	Web Development and .NET Framework	6	0	0	6
CS	323L	Web Development and .NET Framework Lab	0	0	4	2

Dramatic Art (Theatre)

Semester - I

DRMA 102	History and Principles of Dramatic Art	4	0	0	4
DRMA 102L	History and Principles of Dramatic Art Lab	0	0	8	4

Semester - II

DRMA 101	Acting and Speech	4	0	0	4
DRMA 101L	Acting and Speech Lab	0	0	8	4

Semester - III

DRMA 202	Sanskrit Drama Literature	4	0	0	4
DRMA 203L	Transformation to an Actor Lab	0	0	8	4

Semester - IV

DRMA 201	Hindi Drama Literature	4	0	0	4
DRMA 201L	Hindi Drama Literature Lab	0	0	8	4

Semester - V

DRMA 301L	One Act Play Lab	0	0	8	4
	Discipline Elective - I	0	0	8	4

Semester - VI

DRMA 302L	Play and Production Lab	0	0	8	4
	Discipline Elective - II	0	0	8	4

List of Discipline Elective

DRMA 304L	Analysis of One Act Play	0	0	8	4
DRMA 303L	Analysis of Modern Hindi Drama	0	0	8	4
DRMA 306L	Rajasthani Folk Drama Jaipuri Tamasha	0	0	8	4
DRMA 305L	Radio and T.V. Anchoring	0	0	8	4
DRMA 308L	Technical Knowledge of Costume Design	0	0	8	4
DRMA 309L	Technical Knowledge of Make-Up	0	0	8	4
DRMA 307L	Set Design	0	0	8	4

Drawing and Painting

Semester - I

DNP	105	Fundamentals of Visual Art - I	4	0	0	4
DNP	107L	Basic Drawing - I	0	0	6	3
DNP	103L	Basic Sketching and Art Work	0	0	2	1

Semester - II

DNP	106	Fundamentals of Visual Art - II	4	0	0	4
DNP	108L	Basic Drawing - II	0	0	6	3
DNP	104L	Creative Work and Study	0	0	2	1

Semester - III

DNP	201	History of Indian Painting and Sculpture - I	4	0	0	4
DNP	205L	Study from Life - I	0	0	6	3
DNP	203L	Sketching and Media Exploration - I	0	0	2	1

Semester - IV

DNP	202	History of Indian Painting and Sculpture - II	4	0	0	4
DNP	206L	Study from Life - II	0	0	6	3
DNP	204L	Sketching and Media Exploration - II	0	0	2	1

Semester - V

DNP	305L	Sketching and Media Exploration - III	0	0	4	2
		Discipline Elective - I	0	0	6	3
		Discipline Elective - II	0	0	6	3

Semester - VI

DNP	306L	Sketching and Media Exploration - IV	0	0	4	2
		Discipline Elective - III	0	0	6	3
		Discipline Elective - IV	0	0	6	3

List of Discipline Elective

DNP	301L	Pictorial Composition - I	0	0	6	3
DNP	302L	Pictorial Composition - II	0	0	6	3
DNP	303L	Portrait Painting - I	0	0	6	3
DNP	304L	Portrait Painting - II	0	0	6	3
DNP	307L	Screen Printing-I	0	0	6	3
DNP	308L	Screen Printing-II	0	0	6	3

Economics

Semester - I

ECO	106	Micro Economics - I	4	0	0	4
ECO	109	Money and Banking	4	0	0	4

Semester - II

ECO	107	Micro Economics - II	4	0	0	4
STAT	103	Elementary Statistical Methods	4	0	0	4

Semester - III

ECO	202	Macro Economics - I	4	0	0	4
STAT	206	Quantitative Techniques	4	0	0	4

Semester - IV

ECO	203	Macro Economics - II	4	0	0	4
ECO	204	Public Finance	4	0	0	4

Semester - V

ECO	303	Indian Economy - I	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

ECO	304	Indian Economy - II	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

ECO	305	International Economics	4	0	0	4
ECO	301	Development Economics and Environment	4	0	0	4
ECO	306	Economics of Social Sector	4	0	0	4
ECO	308	History of Economic Thought	4	0	0	4
ECO	309	Econometrics and Data Analysis	4	0	0	4

English Literature

Semester - I

ENGL	105	Prose and Short Stories	4	0	0	4
ENGL	106	Romantic Poetry	4	0	0	4

Semester - II

ENGL	104	Fiction	4	0	0	4

ENGL	107	Victorian Poetry	4	0	0	4
Semester - III						
ENGL	201	American Literature	4	0	0	4
ENGL	202	Drama	4	0	0	4
Semester - IV						
ENGL	205	Grammar	4	0	0	4
ENGL	206	Indian Writing in English	4	0	0	4
Semester - V						
ENGL	304	Modern Fiction	4	0	0	4
		Discipline Elective - I	4	0	0	4
Semester - VI						
ENGL	308	Literary Movements: History of Ideas	4	0	0	4
		Discipline Elective - II	4	0	0	4
List of Discipline Elective						
ENGL	305	Modern Poetry	4	0	0	4
ENGL	309	Science Fiction	4	0	0	4
ENGL	303	Modern Drama	4	0	0	4
ENGL	306	Autobiography	4	0	0	4
ENGL	310	Travel Writing	4	0	0	4
Geography						
Semester - I						
GEOG	103	Physical Geography	6	0	0	6
GEOG	101L	Fundamentals of Cartography Lab	0	0	4	2
Semester - II						
GEOG	102	Human Geography	6	0	0	6
GEOG	104L	Statistical Techniques and Data Representation Lab	0	0	4	2
Semester - III						
GEOG	202	Introduction to Geography of India	6	0	0	6
GEOG	203L	Mapping and Prismatic Compass Survey Lab	0	0	4	2
Semester - IV						
GEOG	201	Economic Geography	6	0	0	6
GEOG	204L	Relief Representation and Topographical Maps Lab	0	0	4	2

Semester - V

GEOG	303L	Map Projection Lab	0	0	4	2
		Discipline Elective - I	6	0	0	6

Semester - VI

GEOG	301L	Fundamentals of Geoinformatics Lab	0	0	4	2
		Discipline Elective - II	6	0	0	6

List of Discipline Elective

GEOG	305	Environment and Disaster Management	6	0	0	6
GEOG	302	Geographical Thought	6	0	0	6
GEOG	306	Settlement Geography	6	0	0	6
GEOG	304	World Regional Geography	6	0	0	6

Hindi Literature

Semester - I

HIND	103	हिन्दी व्याकरण एवं काव्यांग	4	0	0	4
HIND	104	उपन्यास साहित्य	4	0	0	4

Semester - II

HIND	101	हिन्दी कहानी	4	0	0	4
HIND	105	मध्ययुगीन काव्य	4	0	0	4

Semester - III

HIND	205	आधुनिक काव्य – ।	4	0	0	4
HIND	203	हिन्दी नाटक एवं एकांकी	4	0	0	4

Semester - IV

HIND	206	आधुनिक काव्य – ।।	4	0	0	4
HIND	204	संस्मरण एवं जीवनी	4	0	0	4

Semester - V

HIND	302	हिन्दी निबन्ध एवं आलोचना	4	0	0	4
		चयनित अध्ययन – ।	4	0	0	4

Semester - VI

HIND	304	व्यंग्य एवं रिपोर्ताज साहित्य	4	0	0	4
		चयनित अध्ययन – ।।	4	0	0	4

List of Discipline Elective

HIND	301	आत्मकथा एवं डायरी साहित्य	4	0	0	4
HIND	306	हिन्दी यात्रा साहित्य	4	0	0	4
HIND	305	महिला आत्मकथा लेखन	4	0	0	4
HIND	303	प्रयोजनमूलक हिन्दी	4	0	0	4
HIND	308	अनुवाद विज्ञान	4	0	0	4
HIND	307	सर्जनात्मक लेखन के विविध आयाम	4	0	0	4
HIND	309	संचार माध्यम और हिन्दी	4	0	0	4

History

Semester - I

HIST	101	History of Early India (upto Mauryan Age)	4	0	0	4
HIST	103	History of Medieval India (1000 to 1526 AD)	4	0	0	4

Semester - II

HIST	102	History of India (200 BC to 1000 AD)	4	0	0	4
HIST	104	History of Medieval India (1526 to 1707 AD)	4	0	0	4

Semester - III

HIST	202	Political History of Modern India (1757 to 1947)	4	0	0	4
HIST	203	Social and Economic History of Modern India (1707 to 1947)	4	0	0	4

Semester - IV

HIST	201	Civilizations of the World	4	0	0	4
HIST	204	Survey of the History of Rajasthan	4	0	0	4

Semester - V

HIST	301	Changing Patterns of World History	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

HIST	302	Introduction to Historiography	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

HIST	303	Tracing Women's History in Indian Society	4	0	0	4
HIST	306	Fundamentals of Indian Society and Culture	4	0	0	4
HIST	307	Trends in the understanding of History	4	0	0	4
HIST	305	An Outline of the History of South India	4	0	0	4
HIST	308	Agriculture in Indian History	4	0	0	4

Home-Science

Semester - I

HSC	101	Basics of Home Science and Resource Management	6	0	0	6
HSC	108L	Interior Decoration Lab	0	0	4	2

Semester - II

HSC	102	Basics of Human Development	4	0	0	4
HSC	107	Fundamentals of Foods and Nutrition	4	0	0	4

Semester - III

HSC	215	Nutrition in Health and Disease	6	0	0	6
HSC	205L	Food and Nutrition Lab	0	0	4	2

Semester - IV

HSC	210	Introduction to Community Nutrition and Extension	4	0	0	4
HSC	212	Life Span Development	4	0	0	4

Semester - V

HSC	308	Introduction to Textiles	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

HSC	312L	Textile care and Clothing Construction Lab	0	0	8	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

HSC	305	Family Dynamics and Parent Education	4	0	0	4
HSC	320	Family and Child Welfare	4	0	0	4
HSC	307	Introduction to Clothing	4	0	0	4
HSC	322	Fundamentals of Family Clothing	4	0	0	4

Indian Classical Dance (Kathak)

Semester - I

DNCE	105	Literature of Indian Classical Dance - I (Kathak)	4	0	0	4
DNCE	111L	Performance of Indian Classical Dance-I (Kathak)	0	0	8	4

Semester - II

DNCE	106	Literature of Indian Classical Dance - II (Kathak)	4	0	0	4
DNCE	112L	Performance of Indian Classical Dance - II (Kathak)	0	0	8	4

Semester - III

DNCE	201	Literature of Indian Classical Dance - III (Kathak)	4	0	0	4
DNCE	207L	Performance of Indian Classical Dance - III (Kathak)	0	0	8	4

Semester - IV

DNCE	202	Literature of Indian Classical Dance - IV (Kathak)	4	0	0	4
DNCE	208L	Performance of Indian Classical Dance - IV (Kathak)	0	0	8	4

Semester - V

DNCE	301L	Performance of Indian Classical Dance - V (Kathak)	0	0	8	4
		Discipline Elective - I	0	0	8	4

Semester - VI

DNCE	312L	Performance of Indian Classical Dance - VI (Kathak)	0	0	8	4
		Discipline Elective – II	0	0	8	4

List of Discipline Elective

MUS	308L	Performance of Indian Classical Music (Tabla)	0	0	8	4

MUS	307L	Performance of Indian Classical Music (Harmonium)	0	0	8	4
DNCE	309L	Performance of Rajasthani Folk Dance	0	0	8	4
DNCE	307L	Performance of Other Classical Dance (Bharatnatyam)	0	0	8	4
DNCE	308L	Performance of Other Classical Dance (Manipuri)	0	0	8	4

Indian Classical Dance (Bharatnatyam)

Semester - I

DNCE	107	Literature of Indian Classical Dance - I (Bharatnatyam)	4	0	0	4
DNCE	109L	Performance of Indian Classical Dance - I (Bharatnatyam)	0	0	8	4

Semester - II

DNCE	108	Literature of Indian Classical Dance - II (Bharatnatyam)	4	0	0	4
DNCE	110L	Performance of Indian Classical Dance - II (Bharatnatyam)	0	0	8	4

Semester - III

DNCE	203	Literature of Indian Classical Dance - III (Bharatnatyam)	4	0	0	4
DNCE	205L	Performance of Indian Classical Dance - III (Bharatnatyam)	0	0	8	4

Semester - IV

DNCE	204	Literature of Indian Classical Dance - IV (Bharatnatyam)	4	0	0	4
DNCE	206L	Performance of Indian Classical Dance - IV (Bharatnatyam)	0	0	8	4

Semester - V

DNCE	305L	Performance of Indian Classical Dance - V (Bharatnatyam)	0	0	8	4
		Discipline Elective - I	0	0	8	4

Semester - VI

DNCE	306L	Performance of Indian Classical Dance - VI (Bharatnatyam)	0	0	8	4
		Discipline Elective - II	0	0	8	4

List of Discipline Elective

MUS	310L	Performance of Indian Classical Music (Maridangam)	0	0	8	4
MUS	309L	Performance of Indian Classical Music (Vocal)	0	0	8	4
DNCE	310L	Performance of Other Classical Dance (Kuchipudi)	0	0	8	4
DNCE	311L	Performance of Other Classical Dance (Kathak)	0	0	8	4
DNCE	309L	Performance of Rajasthani Folk Dance	0	0	8	4

Indian Music

Semester - I

MUS	101	Literature of Indian Classical Music - I	4	0	0	4
MUS	101L	Performance of Indian Classical Music - I	0	0	8	4

Semester - II

MUS	102	Literature of Indian Classical Music - II	4	0	0	4
MUS	102L	Performance of Indian Classical Music - II	0	0	8	4

Semester - III

MUS	201	Literature of Indian Classical Music - III	4	0	0	4
MUS	201L	Performance of Indian Classical Music - III	0	0	8	4

Semester - IV

MUS	202	Literature of Indian Classical Music - IV	4	0	0	4
MUS	202L	Performance of Indian Classical Music - IV	0	0	8	4

Semester - V

MUS	301L	Performance of Indian Classical Music - V	0	0	8	4
		Discipline Elective - I	0	0	8	4

Semester - VI

MUS	302L	Performance of Indian Classical Music - VI	0	0	8	4
		Discipline Elective - II	0	0	8	4

List of Discipline Elective

MUS	308L	Performance of Indian Classical Music (Tabla)	0	0	8	4
MUS	307L	Performance of Indian Classical Music (Harmonium)	0	0	8	4
MUS	303L	Basic Technical Skills for Audio Production	0	0	8	4

Indian Music (Tabla)

Semester - I

MUS	103	Literature of Indian Classical Music - I (Tabla)	4	0	0	4
MUS	105L	Performance of Indian Classical Music - I (Tabla)	0	0	8	4

Semester - II

MUS	104	Literature of Indian Classical Music - II (Tabla)	4	0	0	4
MUS	106L	Performance of Indian Classical Music - II (Tabla)	0	0	8	4

Semester - III

MUS	203	Literature of Indian Classical Music - III (Tabla)	4	0	0	4
MUS	205L	Performance of Indian Classical Music - III (Tabla)	0	0	8	4

Semester - IV

MUS	204	Literature of Indian Classical Music - IV (Tabla)	4	0	0	4
MUS	206L	Performance of Indian Classical Music - IV (Tabla)	0	0	8	4

Semester - V

MUS	305L	Performance of Indian Classical Music - V (Tabla)	0	0	8	4
		Discipline Elective – I	0	0	8	4

Semester - VI

MUS	306L	Performance of Indian Classical Music - VI (Tabla)	0	0	8	4
		Discipline Elective - II	0	0	8	4

List of Discipline Elective

MUS	309L	Performance of Indian Classical Music (Vocal)	0	0	8	4
MUS	307L	Performance of Indian Classical Music (Harmonium)	0	0	8	4
MUS	303L	Basic Technical Skills for Audio Production	0	0	8	4

Management

Semester - I

COM	104	Financial Accounting	4	0	0	4
MGMT	102	Foundation of Management	4	0	0	4

Semester - II

COM	101	Business Environment	4	0	0	4
MGMT	104	Group Behaviour	4	0	0	4

Semester - III

MGMT	103	Foundations of Marketing Management	4	0	0	4
MGMT	205	Foundation of Human Resource Management	4	0	0	4

Semester - IV

COM	211	Principles and Practices of Banking	4	0	0	4
MGMT	202	Basics of Financial Management	4	0	0	4

Semester - V

MGMT	203	Bhartiya Prabandhan	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

MGMT	309	Organizational Studies	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

COM	312	Personal Finance	4	0	0	4
MGMT	308	Operations Management	4	0	0	4
MGMT	208	Retail Environment in Management	4	0	0	4
COM	210	Emerging Banking Services	4	0	0	4
LAW	209	Intellectual Property Law	4	0	0	4
MGMT	305	E - Business	4	0	0	4

Mathematics

Semester - I

MATH	106	Introduction to Calculus	4	0	0	4
STAT	104	Introduction to Probability and Statistics	4	0	0	4

Semester - II

MATH	101	Analytical Solid Geometry	4	0	0	4
MATH	104	Differential Equations	4	0	0	4

Semester - III

MATH	201	Abstract Algebra	4	0	0	4
MATH	206	Real Analysis	4	0	0	4

Semester - IV

MATH	202	Introduction to Linear Algebra	4	0	0	4
MATH	301	Complex Analysis	4	0	0	4

Semester - V

MATH	302	Introduction to Discrete Mathematics	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

MATH	303	Introduction to Numerical Analysis	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

MATH	203	Introduction to Mechanics	4	0	0	4
MATH	304	Linear Programming and its Applications	4	0	0	4
MATH	312	Vector Calculus	4	0	0	4
MATH	310	Number Theory	4	0	0	4
MATH	313	Multivariable Calculus	4	0	0	4

Philosophy

Semester - I

PHIL	101	भारतीय दर्शन – I	4	0	0	4
PHIL	103	विश्व के धर्म – I	4	0	0	4

Semester - II

PHIL	102	भारतीय दर्शन – II	4	0	0	4
PHIL	104	विश्व के धर्म – II	4	0	0	4

Semester - III

PHIL	201	नीतिशास्त्र – ।	4	0	0	4
PHIL	203	पाश्चात्य दर्शन – ।	4	0	0	4

Semester - IV

PHIL	202	नीतिशास्त्र – ।।	4	0	0	4
PHIL	204	पाश्चात्य दर्शन – ।।	4	0	0	4

Semester - V

PHIL	301	समकालीन भारतीय दर्शन – ।	4	0	0	4
PHIL	302	सांख्य–योग – ।	4	0	0	4

Semester - VI

PHIL	303	सांख्य–योग – ।।	4	0	0	4
PHIL	304	तर्कशास्त्र	4	0	0	4

Physical Education

Semester - I

PHED	101	Introduction and History of Physical Education	4	0	0	4
PHED	101L	Games and Sports Skills - I	0	0	8	4

Semester - II

PHED	102	Foundation of Physical Education	4	0	0	4
PHED	102L	Games and Sports Skills - II	0	0	8	4

Semester - III

PHED	201	Anatomy, Physiology and Exercise Physiology	4	0	0	4
PHED	201L	Games and Sports Skills - III	0	0	8	4

Semester - IV

PHED	202	Health Education and First-Aid	4	0	0	4
PHED	202L	Games and Sports Skills - IV	0	0	8	4

Semester - V

PHED	301L	Games and Sports Skills - V	0	0	8	4
		Discipline Elective - I	4	0	0	4

Semester - VI

PHED	302L	Games and Sports Skills - VI	0	0	8	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

PHED	301	Scientific Principles of Sports Training	4	0	0	4
PHED	302	Introduction to Yoga	4	0	0	4
PHED	303	Adapted physical Education	4	0	0	4
PHED	304	Corrective Physical Education and Rehabilitation	4	0	0	4
PHED	305	Methods in physical education	4	0	0	4

Political Science

Semester - I

POL	102	Foundations of Political Science	4	0	0	4
POL	103	Indian Political Thinkers	4	0	0	4

Semester - II

POL	105	National Movement and Constitutional Development in India	4	0	0	4
POL	108	Principles of Political Science	4	0	0	4

Semester - III

POL	201	Indian Political System - I	4	0	0	4
POL	205	Major Governments of the World	4	0	0	4

Semester - IV

POL	202	Indian Political System - II	4	0	0	4
POL	204	Major Governments of South Asia	4	0	0	4

Semester - V

POL	304	Western Political Thinkers	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

POL	303	Major Political Ideologies	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

POL	302	International Relations Since 1945	4	0	0	4
POL	305	Decentralized Democracy in India	4	0	0	4
POL	301	India's Foreign Policy	4	0	0	4
POL	306	Research Methodology in Political Science	4	0	0	4
POL	308	Social Movements in India: Since Independence	4	0	0	4
POL	307	Political Obligation	4	0	0	4

Psychology

Semester - I

PSY	101	Introduction to Psychological Processes	6	0	0	6
PSY	101L	Introduction to Psychological Processes Lab	0	0	4	2

Semester - II

PSY	102	Social Psychology	6	0	0	6
PSY	102L	Social Psychology Lab	0	0	4	2

Semester - III

PSY	205	Statistics and Research Methodology in Psychology	6	0	0	6
PSY	205L	Statistics and Research Methodology in Psychology Lab	0	0	4	2

Semester - IV

PSY	201	Developmental Psychology	6	0	0	6
PSY	201L	Developmental Psychology Lab	0	0	4	2

Semester - V

		Discipline Elective - I	6	0	4	8

Semester - VI

		Discipline Elective - II	6	0	4	8

List of Discipline Elective

PSY	304	Abnormal Psychology	6	0	0	6
PSY	304L	Abnormal Psychology Lab	0	0	4	2
PSY	305	Experimental Psychology	6	0	0	6
PSY	305L	Experimental Psychology Lab	0	0	4	2
PSY	302	Physiological Psychology	6	0	0	6
PSY	302L	Physiological Psychology Lab	0	0	4	2
PSY	306	Introduction to Clinical Psychology	6	0	0	6
PSY	306L	Introduction to Clinical Psychology Lab	0	0	4	2

Public Administration

Semester - I

PUB	101	Indian Administration - I	4	0	0	4
PUB	103	Principles of Public Administration - I	4	0	0	4

Semester - II

PUB	102	Indian Administration - II	4	0	0	4
PUB	104	Principles of Public Administration - II	4	0	0	4

Semester - III

PUB	201	Administrative Institution in India - I	4	0	0	4
PUB	204	State Administration in India with special reference to Rajasthan - I	4	0	0	4

Semester - IV

PUB	202	Administrative Institution in India - II	4	0	0	4
PUB	205	State Administration in India with special reference to Rajasthan - II	4	0	0	4

Semester - V

PUB	303	Comparative Administrative Systems	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

PUB	301	Administrative Thinkers	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

PUB	305	Rural Local Self Government	4	0	0	4
PUB	308	Labour Welfare Administration	4	0	0	4
PUB	306	Urban Local Self Government	4	0	0	4
PUB	307	Governance : Issues and Challenges	4	0	0	4
PUB	309	Nation Building: A Global Perspective	4	0	0	4
PUB	310	Nation Building: An Indian Perspective	4	0	0	4

Sanskrit

Semester - I

SANS	102	आधुनिक नाट्य एवं व्याकरण	4	0	0	4
SANS	103	प्राचीन नाट्य एवं छन्द	4	0	0	4

Semester - II

SANS	101	आर्ष काव्य, निबन्ध एवं अनुवाद	4	0	0	4
SANS	104	पुराण, स्मृति साहित्य एवं व्याकरण	4	0	0	4

Semester - III

SANS	202	आधुनिक काव्य, व्याकरण एवं निबन्ध	4	0	0	4
SANS	204	प्राचीन काव्य एवं अलंकार	4	0	0	4

Semester - IV

SANS	201	आधुनिक गद्य साहित्य एवं व्याकरण	4	0	0	4
SANS	203	प्राचीन गद्य, चम्पू एवं अनुवाद	4	0	0	4

Semester - V

SANS	303	वैदिक साहित्य एवं निबन्ध	4	0	0	4
		विषयाधारित चयनित अध्ययन – 1	4	0	0	4

Semester - VI

SANS	304	वैदिक साहित्य, भारतीय संस्कृति एवं अनुवाद	4	0	0	4
		विषयाधारित चयनित अध्ययन – 2	4	0	0	4

List of Discipline Elective

SANS	301	शास्त्र साहित्य एवं व्याकरण–भाग–1	4	0	0	4
SANS	302	शास्त्र साहित्य एवं व्याकरण–भाग–2	4	0	0	4
SANS	305	भारतीय दर्शन का सामान्य परिचय	4	0	0	4
SANS	602	प्राचीन भारतीय संस्थाएँ	4	0	0	4
SANS	307	आयुर्वेद एवं वनस्पति विज्ञान	4	0	0	4
SANS	306	वैदिक शिक्षा साहित्य	4	0	0	4
SANS	308	संस्कृत कथा साहित्य	4	0	0	4

Sociology

Semester - I

SOC	101	Basic Elements of Sociology	4	0	0	4
SOC	104	Structure of Indian Society	4	0	0	4

Semester - II

SOC	102	Issues Concerning Indian Society	4	0	0	4
SOC	103	Social Statics and Social Dynamics	4	0	0	4

Semester - III

SOC	203	Introduction to Rural Sociology	4	0	0	4
SOC	205	Research Methods in Sociology	4	0	0	4

Semester - IV

SOC	204	Population and Society	4	0	0	4

SOC	206	Sociology of Change and Development	4	0	0	4

Semester - V

SOC	301	Masters of Sociological Thought - I	4	0	0	4
		Discipline Elective - I	4	0	0	4

Semester - VI

SOC	302	Masters of Sociological Thought - II	4	0	0	4
		Discipline Elective - II	4	0	0	4

List of Discipline Elective

SOC	303	Social Anthropology	4	0	0	4
SOC	305	Sociology of Mass Communication	4	0	0	4
SOC	307	Sociology of Gender	4	0	0	4
SOC	308	Sociology of Social Movements	4	0	0	4
SOC	309	Economic Sociology	4	0	0	4

Statistics

Semester - I

STAT	106	Probability and Descriptive Statistics	6	0	0	6
STAT	106L	Probability and Descriptive Statistics Lab	0	0	4	2

Semester - II

STAT	109	Measures of Association and Probability Distributions	6	0	0	6
STAT	109L	Measures of Association and Probability Distributions Lab	0	0	4	2

Semester - III

STAT	209	Sampling Distributions	6	0	0	6
STAT	209L	Sampling Distributions Lab	0	0	4	2

Semester - IV

STAT	207	Statistical Inference and Quality Control	6	0	0	6
STAT	207L	Statistical Inference and Quality Control Lab	0	0	4	2

Semester - V

		Discipline Elective - I	6	0	4	8

Semester - VI

		Discipline Elective - II	6	0	4	8

List of Discipline Elective

			L	T	P	C
STAT	302	Sampling Techniques and Design of Experiments	6	0	0	6
STAT	302L	Sampling Techniques and Design of Experiments Lab	0	0	4	2
STAT	301	Applied Statistics	6	0	0	6
STAT	301L	Applied Statistics Lab	0	0	4	2
STAT	303	Financial Statistics	6	0	0	6
STAT	303L	Financial Statistics Lab	0	0	4	2
STAT	304	Health Statistics and Population Dynamics	6	0	0	6
STAT	304L	Health Statistics and Population Dynamics Lab	0	0	4	2

Textile Designing (Weaving)

Semester - I

TXTD	102	Weaving - I	4	0	0	4
TXTD	102L	Weaving - I Lab	0	0	8	4

Semester - III

TXTD	203	Weaving - II	4	0	0	4
TXTD	203L	Weaving - II Lab	0	0	8	4

Semester - IV

TXTD	204	Weaving - III	4	0	0	4
TXTD	204L	Weaving - III Lab	0	0	8	4

Semester - V

		Discipline Elective - II (Weaving)	4	0	8	8

Semester - VI

		Discipline Elective - II (Weaving)	4	0	8	8

List of Discipline Elective

TXTD	305	Weaving - IV	4	0	0	4
TXTD	303L	Weaving - IV Lab	0	0	8	4
TXTD	304	Weaving CATD	4	0	0	4
TXTD	304L	Weaving CATD Lab	0	0	8	4

Textile Designing (Printing)

Semester - II

TXTD	101	Dyeing and Printing - I	4	0	0	4

TXTD	101L	Dyeing and Printing - I Lab	0	0	8	4

Semester - III

TXTD	201	Dyeing and Printing - II	4	0	0	4
TXTD	201L	Dyeing and Printing - II Lab	0	0	8	4

Semester - IV

TXTD	202	Dyeing and Printing - III	4	0	0	4
TXTD	202L	Dyeing and Printing - III Lab	0	0	8	4

Semester - V

		Discipline Elective - II (Printing)	4	0	8	8

Semester - VI

		Discipline Elective - II (Printing)	4	0	8	8

List of Discipline Elective

TXTD	306	Digital Printing Method and Process	4	0	0	4
TXTD	306L	Digital Printing Method and Process Lab	0	0	8	4
TXTD	301	Dyeing and Printing - IV	4	0	0	4
TXTD	301L	Dyeing and Printing - IV Lab	0	0	8	4
TXTD	302	Dyeing and Printing CATD	4	0	0	4
TXTD	302L	Dyeing and Printing CATD Lab	0	0	8	4
TXTD	307	Indian Textile	4	0	0	4
TXTD	307L	Indian Textile Lab	0	0	8	4
TXTD	308	Printing and Finishing	4	0	0	4
TXTD	308L	Printing and Finishing Lab	0	0	8	4
TXTD	309	Surface Development Techniques	4	0	0	4
TXTD	309L	Surface Development Techniques Lab	0	0	8	4
TXTD	310	Textile Illustration Techniques	4	0	0	4
TXTD	310L	Textile Illustration Techniques Lab	0	0	8	4

List of Core Foundation Course

Course Code		Course Name	L	T	P	C
BVF	002	Environment Studies	2	0	0	2
BVF	013	Indian Cultural Heritage	2	0	0	2
BVF	015	Parenthood and Family Relation	2	0	0	2
BVF	017	Selected Writings of Great Authors - I	2	0	0	2
BVF	020	Women in Indian Society	2	0	0	2

List of Elective Foundation Course

Course Code		Course Name	L	T	P	C
BVF	010	Design Thinking	2	0	0	2
BVF	012	Human Body and Health	2	0	0	2
BVF	016	Science of Happiness	2	0	0	2
BVF	019	Universal Human Values	2	0	0	2
BVF	018	Selected Writings of Great Authors - II	2	0	0	2

List of Vocational Course

Course Code		Course Name	L	T	P	C
VOC	011L	Basic Dress Making	0	0	4	2
VOC	014	Entrepreneurship - I	2	0	0	2
VOC	009	Library Science - I	1	0	0	1
VOC	009L	Library Science - I Lab	0	0	2	1
VOC	018	Photography - I	0	0	4	2
VOC	020	Radio Production - I	2	0	0	2
VOC	012	Computer Assisted Learning and Teaching	1	0	0	1
VOC	012L	Computer Assisted Learning and Teaching Lab	0	0	2	1
VOC	016	Introduction to Artificial Intelligence - I	2	0	0	2
VOC	022	Web Designing and Internet Technology - I	1	0	0	1

VOC	022L	Web Designing and Internet Technology - I Lab	0	0	2	1
VOC	005L	Dress Designing	0	0	4	2
VOC	013	Emerging Technologies for Learning and Teaching	2	0	0	2
VOC	015	Entrepreneurship - II	2	0	0	2
VOC	017	Introduction to Artificial Intelligence - II	2	0	0	2
VOC	010	Library Science - II	1	0	0	1
VOC	010L	Library Science - II Lab	0	0	2	1
VOC	019	Photography - II	0	0	4	2
VOC	021	Radio Production - II	2	0	0	2
VOC	023	Web Designing and Internet Technology - II	1	0	0	1
VOC	023L	Web Designing and Internet Technology - II Lab	0	0	2	1

1. Student can opt for at most 2 additional Open (Generic) audit/credit Elective from other disciplines opting at most 1 per semester from Semesters III onwards with prior permission of respective heads and time table Permitting.

2. Every Student shall also opt for:
   Five Fold Education: Physical Education I, Physical Education II,
   Five Fold Education: Aesthetic Education I, Aesthetic Education II,
   Five Fold Education: Practical Education I, Practical Education II
   one each semester

*L-Lecture hrs/week ; T - Tutorial hrs/week;
 P-Project/Practical/Lab/All other non-classroom academic activities, etc. hrs/week; C- Credit Points of the Course

Note: Syllabus of Foundation and Vocational courses are available in separate booklet "Curriculum Structure and Syllabus Foundation and Vocational Courses".

Five Fold Activities

Aesthetic Education I/II		Physical Education I/II	
BVFF 101	Classical Dance (Bharatnatyam)	BVFF 201	Aerobics
BVFF 102	Classical Dance (Kathak)	BVFF 202	Archery
BVFF 103	Classical Dance (Manipuri)	BVFF 203	Athletics
BVFF 104	Creative Art	BVFF 204	Badminton
BVFF 105	Folk Dance	BVFF 205	Basketball
BVFF 106	Music-Instrumental (Guitar)	BVFF 206	Cricket
BVFF 107	Music-Instrumental (Orchestra)	BVFF 207	Equestrian
BVFF 108	Music-Instrumental (Sarod)	BVFF 208	Flying - Flight Radio Telephone Operator's Licence (Restricted)
BVFF 109	Music-Instrumental (Sitar)	BVFF 209	Flying - Student Pilot's Licence
BVFF 110	Music-Instrumental (Tabla)	BVFF 229	Aeromodelling
BVFF 111	Music-Instrumental (Violin)	BVFF 210	Football
BVFF 112	Music-Vocal	BVFF 211	Gymnastics
BVFF 113	Theatre	BVFF 212	Handball
Practical Education I/II		BVFF 213	Hockey
BVFF 301	Banasthali Sewa Dal	BVFF 214	Judo
BVFF 302	Extension Programs for Women Empowerment	BVFF 215	Kabaddi
BVFF 303	FM Radio	BVFF 216	Karate - Do
BVFF 304	Informal Education	BVFF 217	Kho-Kho
BVFF 305	National Service Scheme	BVFF 218	Net Ball
BVFF 306	National Cadet Corps	BVFF 219	Rope Mallakhamb
		BVFF 220	Shooting
		BVFF 221	Soft Ball
		BVFF 222	Swimming
		BVFF 223	Table Tennis
		BVFF 224	Tennis
		BVFF 225	Throwball
		BVFF 226	Volleyball
		BVFF 227	Weight Training
		BVFF 228	Yoga

Every Student shall also opt for:
Five Fold Education: Physical Education I, Physical Education II,
Five Fold Education: Aesthetic Education I, Aesthetic Education II,
Five Fold Education: Practical Education I, Practical Education II
one each semester

Evaluation Scheme and Grading System

Continuous Assessment (CA) (Max. Marks)					End-Semester Assessment (ESA) (Max. Marks)	Grand Total (Max. Marks)
Assignment		Periodical Test		Total (CA)		
I	II	I	II			
10	10	10	10	40	60	100

In all theory, laboratory and other non classroom activities (project, dissertation, seminar, etc.), the Continuous and End-semester assessment will be of 40 and 60 marks respectively. However, for Reading Elective, only End semester exam of 100 marks will be held. Wherever desired, the detailed breakup of continuous assessment marks (40), for project, practical, dissertation, seminar, etc shall be announced by respective departments in respective student handouts.

Based on the cumulative performance in the continuous and end-semester assessments, the grade obtained by the student in each course shall be awarded. The classification of grades is as under:

Letter Grade	Grade Point	Narration
O	10	Outstanding
A+	9	Excellent
A	8	Very Good
B+	7	Good
B	6	Above Average
C+	5	Average
C	4	Below Average
D	3	Marginal
E	2	Exposed
NC	0	Not Cleared

Based on the obtained grades, the Semester Grade Point Average shall be computed as under:

$$SGPA = \frac{CC_1*GP_1 + CC_2*GP_2 + CC_3*GP_3 + ---- + CC_n*GP_n}{CC_1 + CC_2 + CC_3 + ---- + CC_n} = \frac{\sum_{i=1}^{n} CC_i*GP_i}{\sum_{i=1}^{n} CC_i}$$

Where n is the number of courses (with letter grading) registered in the semester, CC_i are the course credits attached to the ith course with letter grading and GP_i is the letter grade point obtained in the ith course. The courses which are given Non-Letter Grades are not considered in the calculation of SGPA.

The Cumulative Grade Point Average (CGPA) at the end of each semester shall be computed as under:

$$CGPA = \frac{CC_1*GP_1 + CC_2*GP_2 + CC_3*GP_3 + ---- + CC_n*GP_n}{CC_1 + CC_2 + CC_3 + ---- + CC_n} = \frac{\sum_{i=1}^{n} CC_i*GP_i}{\sum_{i=1}^{n} CC_i}$$

Where n is the number of all the courses (with letter grading) that a student has taken up to the previous semester.

Student shall be required to maintain a minimum of 4.00 CGPA at the end of each semester. If a student's CGPA remains below 4.00 in two consecutive semesters, then the student will be placed under probation and the case will be referred to Academic Performance Review Committee (APRC) which will decide the course load of the student for successive semester till the student comes out of the probationary clause.

To clear a course of a degree program, a student should obtain letter grade C and above. However, D/E grade in two/one of the courses throughout the UG/PG degree program respectively shall be deemed to have cleared the respective course(s). The excess of two/one D/E course(s) in UG/PG degree program shall become the backlog course(s) and the student will be required to repeat and clear them in successive semester(s) by obtaining grade C or above.

After successfully clearing all the courses of the degree program, the student shall be awarded division as per following table.

Division	CGPA
Distinction	7.50 and above
First Division	6.00 to 7.49
Second Division	5.00 to 5.99
Pass	4.00 to 4.99

CGPA to % Conversion Formula: % of Marks Obtained = CGPA * 10

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Disciplinary Courses

Applied Statistics

First Semester

MATH 102   Basic Mathematics

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On completion of the course, the student will be able to:

- Demonstrate understanding of the particular progression work (AP, GP).
- Describe the relations between sets regarding equality, subset, and proper subset, using proper notation.
- Perform the operations of union, intersection, complement, and difference on sets using proper notation.
- Demonstrate understanding of the principles and concepts of coordinate geometry.
- Use differentiation and integration techniques in problem solving.

Unit 1   *Algebra-* Sequences and series, finite and infinite series, Arithmetic and geometrical progressions – Determination of nth term and sum to n terms, arithmetic and geometric means between two numbers, sum of an arithmetic- geometric progression, sum of an infinite G.P.

Unit 2   *Set Theory: S*ets, Operation on sets, union intersection complements Representation of Sets by Venn Diagrams De Morgan's Law, inclusion-exclusion principle & its applications, Logarithms- Definition and laws regarding product, quotient, power and change of base. Partial fractions (simple problems).

Unit 3   *Co-ordinate Geometry:* Rectangular co-ordinates, quadrants, Distance between two points. The section formula, Area of a triangle, Locus of a point, equation to the locus, graph of a linear function, Equations to straight lines- Parallel to axes, the slope form, the intercept form, normal form, general linear form, point slope form, two points form, Point of intersection of two straight lines, angle between two lines, relation between the slopes of two lines, which are (i) Parallel and (ii) Perpendicular, Line through

the point of intersection of two given lines, concurrency of lines, co-linearity of points.

Unit 4 Differential Calculus*:* Functions, limit of function evaluation of limits of functions, derivative of a function, derivative of x^n, $\sin x$, $\cos x$, e^x , $\log_e x$ by ab-initio method, differentiation of algebraic, circular, exponential and logarithmic functions, differentiation of trigonometric functions sum, difference, product and quotient of two functions, differential coefficient of a function of a function. Derivative of second order, partial differentiation (simple problems) maxima and minima of functions of one independent variable.

Unit 5 Integral Calculus: Integration as inverse operation of differentiation, indefinite integral, integration of simple functions, integration by substitution, Integration by parts, Definite integral properties of definite integrals (without proof).

Differential Equations: Formation of differential equation order and degree of a differential equation, solution of a differential equation, General solution, particular solution and singular solution, Solution of differential equations of first order and first degree- variables separable from only.

Text Books:

1. Sharma, G. C. & Jain, M. (2001). *Essential Mathematics*. Galgotia Publication Pvt. Ltd.

Reference Books:

1. Sharma, G. C. & Jain, M. (2001). *Mathematics for B.C.A*. Galgotia Publication Pvt. Ltd.

Suggested E-learning material

1. Matrix https://www.askiitians.com/iit-jee-algebra/matrices-and-determinants.

2. Sequence and Series ncert.nic.in/ncerts/l/keep209.pdf

3. Set, Function, Relation ncert.nic.in/ncerts/l/keep201.pdf

4. *LPP* https://www.analyticsvidhya.com/.../lintroductory-guide-on-linear-programming-explain

STAT 101   Basic Statistics

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On completion of the course, the student will be able to:

- Distinguish between qualitative variables and quantitative variables.
- Differentiate between discrete and continuous variables.
- Construct/draft questionnaire.
- Identify the need of Classification and Tabulation.
- Construct frequency tables, Interprets the data, identifies the importance of diagrammatic presentation of data.
- Explain and evaluate various measures of central tendency.
- Evaluate and interpret partition values – Quartiles, Deciles and Percentiles

Unit 1   Definition, scope and limitations of Statistics, Concept of Statistical population. Sample, Sample Unit & Sampling Units Attributes and variables. Types of data: Collection of primary and secondary data. Sample and census survey - their advantages and disadvantages. Types of Sampling and Non-Sampling errors.

Unit 2   Classification and Tabulation of data. Construction of frequency table. Frequency distribution. Diagrammatic representation of data: Bar diagrams & their types, Pie diagram. Graphical presentation of data: Histogram, Frequency polygon, Frequency Curve & O-gives.

Unit 3   Measures of central tendency: Arithmetic Mean, Geometric Mean, Harmonic Mean, Median & Mode. Quartiles , Deciles,Percentiles

Unit 4   *Permutation and combination*- simple problems under restrictions. Binomial theorem for positive integral index and for any index (without proof), application of binomial theorem in summation of infinite series.Application of exponential theorem and logarithmic series in summation of infinite series

Unit 5   *Matrices*- Definition, order of a matrix, types of matrices rectangular matrix, square   matrix, row matrix, column matrix, triangular matrix, diagonal matrix, unit matrix, null matrix, transpose of a matrix, symmetric and skew- symmetric and

subtraction of matrices, matrix multiplication commutative, associative and distributive laws for matrix addition and multiplication. Inverse of matrix, rank of matrices, determinant of a matrix, properties of determinants (without proof), evaluation of determinants up to third order

Text Books:

1. Gupta, S. C., & Kapoor, V. K. (2013). *Fundamental of Mathematical Statistics* (11th ed.). Sultan Chand Publication, New Delhi.

2. Sharma, G. C., & Jain, M. (2001). *Essential Mathematics*. Galgotia Publication Pvt. Ltd.

Reference Books:

1. Gupta, S. P. (2017). *Statistical Methods* (17th ed.). Sultan Chand & Sons, New Delhi. (for applications)

2. Freund, J. E. (2004). *Modern Elementary Statistics (11th ed.)*. Pearson Education.

Suggested E-learning material

1. Probability and its concept-
   https://ocw.mit.edu/courses/mathematics/18-05-introduction-to-probability-and-statistics-spring-2014/

2. Elementary Statistics -
   https://newonlinecourses.science.psu.edu/statprogram/stat200

3. Probability and Statistics- https://nptel.ac.in/courses/111105041/

4. Permutation and Combination-
   https://nptel.ac.in/courses/106106094/28

5. Matrices- https://nptel.ac.in/courses/122104018/

Second Semester

STAT 107   Statistical Methods

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: On completion of the course, the student will be able to:

- Explain the purpose of measures of dispersion, and the information they convey.
- Select an appropriate measure of dispersion and correctly calculate and interpret the statistic.
- Describe and explain the mathematical characteristics of the standard deviation.
- Apply the definition of independence to attempt to determine whether an assumption of independence is justifiable in a given situation.
- Find probabilities of single events, complementary events and the unions and intersections of collections of events.
- Describe the main properties of probability distributions and random variables.
- Identify the random variable(s) of interest in a given scenario.

Unit 1   Measures of Dispersion: Absolute Measures & Relative Measures-Range, Quartile deviation Mean deviation, Standard Deviation & Coefficient of Variation, Moments, Measures of Skewness and Kurtosis.

Unit 2   Theory of Attributes: Classes and class frequencies, Consistency of data, Independence of Attributes, Contingency table, Association of Attributes, Measures of Association, Curve fitting by the principle of least squares, Fitting of straight line, Parabola, Power curves and exponential curves.

Unit 3   Bivariate distributions, Correlation and regression, Pearson's correlation coefficient, Lines of Regression and Regression coefficient, Rank correlation and Spearman's rank correlation coefficient, Partial and multiple correlation for three variables only.

Unit 4   Basic concept of probability, Random Experiment, Sample space, Events, Combination of two or more events Classical Empirical and Axiomatic approach to probability. Conditional probability with simple problems, Statistical independence of events, Addition and multiplication theorem of probability, Bayes' theorem without proof.

Unit 5   Random variable Discrete & continuous, Univariate & Bivariate, Marginal and Conditional distribution, Properties of distribution function (without proof) Independence of random variable, (Problems based on change of order of integration are excluded)

Note: Use of scientific calculator is permissible.

Text Books:

1. Goon, A.M., Gupta, M.K., & Gupta B. D. *Fundamental of Statistics*. Culcata, The World Press Pvt. Ltd.

2. Gupta, O.P. *Mathematical Statistics.* Meerut, Keddarnath Publication.

Reference Books:

1. Mood, M. A.,Graybill, F. & Boes C. D. *Introduction to the theory of statistics* (3rd ed.). McGraw Hill and Co.

2. Paul, L. M. (1970). *Introductory probability and statistical applications* (2nd ed.). Oxford & IBM Publishing Co. Pvt.

3. Yule, G. U. & Kendall, M.G. (1999). *An Introduction to the theory of Statistics* (14th ed.).

Suggested E-learning material

1. Introduction to Probability and Statistics-
   https://ocw.mit.edu/courses/mathematics/18-05-introduction-to-probability-and-statistics-spring-2014/

2. Elementary Statistics-
   https://newonlinecourses.science.psu.edu/statprogram/stat200

3. Probability and Statistics-https://nptel.ac.in/courses/111105041/

STAT 107L   Statistical Methods Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: On successful completion of the course, students will be able to:

- Make the frequency distribution for inclusive and exclusive type of class intervals on excel.
- Construct the table for given raw data.
- Draw the graphs for the given data like histogram, frequency polygon, frequency curve and ogives.
- Draw the diagrams like bar diagram and pie charts etc.
- Calculate the measures of central tendency and dispersion on excel for given set of observations.
- Fit the curves like straight line, parabola, exponential and power curve by using excel.

Course Content:

1. Preparation of frequency table by using exclusive and inclusive method of classification for continuous/discrete variable.
2. Tabulation of data.
3. Graphical representation of data by:
   (i) Histogram
   (ii) Frequency polygon
   (iii) Frequency Curve
   (iv) Ogives
4. Diagrammatic representation of data by:
   (i) Simple Bar, Sub-divided Bar and Multiple Bar diagrams.
   (ii) Squares, Circles and Pie-diagrams.
5. Determination of Mean, Median, Mode, G.M., H.M., Quartiles, Deciles and Percentiles.
6. Computation of:
   (i) Range, Standard deviation, Mean deviation, Quartile deviation and Coefficient of variation.
   (ii) Combined mean and combined standard deviation.

7. Computation of first four moments with Sheppard's correction, Measures of Skewness and kurtosis.

8. Fitting of the following curves by the method of least squares:
   (i) Straight line
   (ii) Parabola
   (iii) Exponential Curve
   (iv) Power Curve

9. Computation of coefficients of correlation and rank correlation.

10. Fitting of regression lines.

11. Testing of independence of attributes.

12. Yule's coefficient of association for attributes.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus of paper may be set in the practical examination.

(ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

(iii) Where it is feasible practical practice should be done through spreadsheet, package or programming

Third Semester

STAT 205 Probability Distributions and Numerical Analysis

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: On completion of the course, students will be able to:

- Understand the concepts and applications of some important probability distributions.
- Differentiate between the discrete & continuous probability distributions &to find their statistical characteristics.
- Understand the expectation, moments, generating functions, cumulative distribution function their relations and the concepts behind them.
- Understand some basic numerical operators and their relations.
- Derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear and nonlinear equations, and the solution of differential equations and apply them to obtain approximate solutions to mathematical problems.

Unit 1 *Finite differences*: Meaning of interpolation and extrapolation, difference table and nth order difference of a polynomial, Operators & E and their inter relationships, Factorials, Newton's Forward and Backward Interpolation

Unit 2 Newton's and Lagrange's Divided Difference formulae, Gauss and Stirling's Interpolation Formulae, Numerical Differentiation, Numerical integration- Trapezoidal Rule and Simpson's 1/3 & 3/8 rule

Unit 3 Mathematical Expectation*:* Addition and Multiplication theorem, Variance and covariance, V (X+Y) and V (X-Y), Moment generating and cumulant generating functions with their properties, Relationship among central moments and cumulants.

Unit 4 Discrete probability distributions: Uniform, Binomial and Poisson distribution with their important properties and applications (Mode and Median are excluded), Fitting of Binomial and Poisson distributions, limiting case of Binomial and Poisson distributions (without proof).

Unit 5 Continuous probability distributions: Rectangular, Exponential and Normal distributions with their properties and applications, Fitting of Normal distribution.

Note: Use of scientific calculator is permissible.

Text Books:

1. Bansal, J.L., & Ojha, J.P.N. *Numerical Analysis*. Jaipur Publishing House.

2. Goon, A.M., Gupta, M.K., & Dasgupta, B. *Fundamental of Statistics*. (Volume.1). The World Press Pvt. Ltd.

3. Gupta, S.C., & Kapoor V.K. *Fundamental of Mathematical Statistics*. New Delhi, Sultan Chand & Sons.

Reference Books:

1. Mood, M. A., Boes, G. F., & Duane, C. *Introduction to the theory of Statistics* (3rd ed.). Mc Graw Hill and Co.

2. Meyer, P.L. (*1970*). *Introductory Probability and Statistical Applications* (2nd ed.). New Delhi, Oxford & IBH Publishing Co. Pvt. Ltd.

Suggested E-learning material

1. *Introduction to Numerical Analysis » Lecture notes* .

   https://ocw.mit.edu/courses/mathematics/18-330-introduction-to-numerical-analysis-spring-2004/lecture-notes/

2. Probability and Random Variables

   https://ocw.mit.edu/courses/mathematics/18-440-probability-and-random-variables-spring-2014/

3. Numerical Analysis- https://nptel.ac.in/courses/111107062/

4. Probability - https://nptel.ac.in/courses/111104032/

5. Probability distributions-https://nptel.ac.in/courses/111105041/8

STAT 205L Probability Distributions and Numerical Analysis Lab

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: On completion of this course the students will be able to:

- Fit the probability distributions on the raw data by using MS Excel software.
- Find out the missing values using the techniques of interpolation.
- Obtain the approximate values of differentiation and integration using numerical techniques on MS Excel.
- Obtain the solution of linear and nonlinear equations and the solution of differential equations and apply them to obtain approximate solutions to mathematical problems.

1. Fitting of

   (i) Binomial   (ii) Poisson and   (iii) Normal distribution.

2. Estimation of missing values in case of equal intervals.

3. Interpolation for equal and unequal intervals by:

   (i)   Newton-Gregory formula

   (ii) Newton's divided difference formula

   (iii) Lagrange's formula

   (iv) Gauss's Formula

   (v) Stirling's Formula

4. Numerical Differentiation

5. Numerical integration by:

   (i)   Trapezoidal rule

   (ii) Simpson's 1/3rd rule

   (iii) Simpson's 3/8th rule.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus of paper may be set in the practical examination.

   (ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

   (iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

Fourth Semester

STAT 202 Inferential Statistics and Quality Control

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: On successful completion of the course the students should be able to,

- Define estimator, its unbiasedness and efficiency.
- Obtain maximum likelihood estimates of parameters of some simple distributions.
- Perform testing of significance of single mean, proportion, s. d. and difference of two means, proportions, s. d, variances for small and large samples.
- Understand the concept of non-parametric testing.
- Apply the non-parametric methods to test for single population and two populations.
- Understand the concept of statistical quality control.
- Construct control charts for variables and attributes.

Unit 1 Concept of estimation, estimators and estimator, Unbiasedness and efficiency of estimators. Maximum likelihood estimator with simple problems, Properties of MLE (without proof), Testing of Hypothesis; Simple and composite hypothesis; one tail and two tail tests; two types of errors; Levels of significance and critical region.

Unit 2 Concept of sampling and sampling distribution, Standard error Meaning and role, Large sample tests of significance for single mean, standard deviation and proportion, Test of significance of difference between two means, standard deviations and proportions.

Unit 3 Definition of Chi-square, t and F statistics and their applications in test of significance, *Chi-square test*: For independence of attributes, variance of normal distribution & goodness of fit, *t-test*: For one sample, two sample, paired case and correlation coefficient, *F-test*: For testing the equality of two variances.

Unit 4 Non-parametric Methods- Need, meaning and assumptions; applications of Run, Sign, Median and Mann Whitney U-test for one sample and two sample problems based on small and large samples.

Unit 5 Statistical quality control-chance and assignable causes of variations. Concept of process control, control charts for mean, range, standard deviation and p, np & c charts & their uses; concept of product control, producer's risk and consumer's risk.

Note: Use of scientific calculator is permissible.

Text Books:

1. Gupta, S. C. & Kapoor, V. K. (2000). *Fundamentals of mathematical statistics*. New Delhi, Sultan Chand & Sons. (for applications)

2. Gupta, S. P. (2014). *Statistical Methods*. New Delhi, Sultan Chand and Sons.

3. Goon, A. M., Gupta, M. K. & Dasgupta, B. (1998). *An outline of statistical theory*. Calcutta, World Press Private.

4. Montgomery, D. C. (2001). *Introduction to statistical quality control*. New York, John Wiley and Sons.

Reference Books:

1. Mood, A. M., Boes, D. C. & Graybill, F. A. (1974). *Introduction to the theory of statistics*. East Windsor, NJ: McGraw-Hill, Inc.

2. Casella, G. & Berger, R.L. (1990) *Statistical Inference*. Duxbury Press, California.

3. Hogg, R. V. & Craig, A. T. (1959). *Introduction to mathematical statistics*. (5th ed.). Pearson Education.

4. Gibbons, J. D. & Chakraborti, S. (2011). *Nonparametric statistical inference*. (3rd ed.). Marcel Dekker Inc.

Suggested E-learning material:

1. Lecture notes and video on "Parameters, Statistics, and Sampling Error":
   http://www.statisticslectures.com/topics/parametersstatistics/

2. Video lectures on Introduction to Data Analytics:
   https://nptel.ac.in/courses/110106064/

3. Lecture notes and video on "Quality Control in Textile Industry":
   https://nptel.ac.in/courses/116102019/

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STAT 202L Inferential Statistics and Quality Control Lab

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		0	0	4	2

Learning Outcomes: On successful completion of the course, students will be able to,

- Test the significance of single mean, proportion, s. d. and difference of two means, proportions, s. d. and variances for small and large samples.

- Understand when and how to use various non parametric tests such as Sign test, Run test, Median test etc. for single population and two populations.

- Plot various control charts for variables and attributes such as X, R, and s charts and determine whether the given procedure is in statistical control or out of statistical control.

1. Test of significance:
   (i) Large sample tests for mean and proportions for one and two sample problems.
   (ii) Chi-square test for variance, goodness of fit and independence of attributes.
   (iii) Test for mean and difference of means (paired and unpaired cases) and for correlation coefficient.
   (iv) F test for equality of population variances.

2. Controls Charts:
   (i) X, R, and s charts
   (ii) p and np charts for equal and unequal sample sizes.
   (iii) c-chart.

3. Non-parametric methods: Sign, Median, Run and Mann Whitney U-tests.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus of may be set in the practical examination.

     (ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practical.

     (iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

Fifth Semester/Sixth Semester

Discipline Electives I & II

STAT 302 Sampling Techniques and Design of Experiments

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: On successful completion of this course, student will be able to,

- Understand the Simple and Stratified random sampling techniques.
- Understand the ratio estimation procedure.
- Apply ANOVA for one-way and two–way classification, fixed effect models with equal number of observations per cell.

Unit 1 Sample survey procedures, Role of sampling theory, Probability and non-probability sampling. Mean square error. Accuracy and precision of an Estimator. SRSWR and SRSWOR. Variance of the estimate of population mean and population total. Estimation of standard error for sample mean.Sampling for proportions and percentages (with/without replacement). Variance of sample estimate, estimated variances of these estimates.

Unit 2 Stratified Random Sampling: Estimate of Population mean and its variance.

Allocation of sample size: Proportional allocation and optimum allocation (with/without varying cost). Comparison of simple random sampling with proportional and optimum allocation. Estimation of the sample size.

Unit 3 Systematic Sampling-Estimation of variance of the systematic sample mean. Comparison of systematic Sampling with simple random and stratified sampling. Estimation of the ratio and ratio estimates for population mean and population total. Approximate formula for variance and Bias of the ratio estimates.

Unit 4 Concept of Analysis of variance (i) One-way classification with equal/unequal observations per class. (ii) Two-way classification with one observation per cell. Fixed effect models of (i) and (ii)

and the assumptions involved. Estimation of treatment effects, treatment differences and confidence limits for the same. Expectations of sum of squares, variances of the estimates.

Unit 5 Meaning of experiment, Experimental unit, Treatment, Field, Block, Experimental error, Precision, Uniformity trials, Principles of designs-replication, Randomization and Local Control, Efficiency of design choice of size and shape of plots and blocks. Completely Randomized design, Randomized Block design and Latin square Design-Analysis of these designs, standard error of treatment differences, comparison of their efficiencies.

Note: Use of Scientific calculator is permissible.

Text Books:

1. Sukhatme, P. V. & Sukhatme, B. V. (1970). *Sampling Theory of Survey with Applications*. (2nd ed.), Piyush Publication.

2. Goon, A. M., Gupta, M. K. & Gupta, B. D. (2001). *Fundamental of Statistics.* (Volume. II). The World Press pvt. ltd.

Reference Books:

1. Cochran, W. G. (1977). *Sampling Techniques*. (3rd ed.). Wiley Eastern Limited.

2. Singh, D. & Chaudhary, F. S. (2002). *Theory and Analysis of Sample survey Design*. New Age International Publisher.

3. Joshi, D. D. (2003). *Linear Estimation and Design of Experiments.* New Age International Publisher.

4. Das, M. N. & Giri, N. G. (2002). *Design and Analysis of Experiments*. New Age International Publisher.

Suggested E-learning material:

1. Sampling Theory, NPTEL. https://nptel.ac.in/courses/111104073/

2. Biostatistics and Design of Experiments, NPTEL, https://nptel.ac.in/courses/102106051/

3. Design of Experiments and sample Survey. ePATHSHALA. https://epgp.inflibnet.ac.in/ahl.php?csrno=34

STAT 302L Sampling Techniques and Design of Experiments Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: On completion of the course the students will be able to:

- Learn the basic principles underlying survey design and estimation.
- How to draw a random sample by using with and without replacement sampling technique in excel.
- Calculate the sampling mean and sampling variance in case of SRSWR and SRSWOR.
- Draw a random sample from stratified and systematic sampling and also to compare the efficiencies of these sampling techniques with respect to each other.
- Analyze the results of a designed experiment in order to conduct the appropriate statistical analysis of the data.
- Compare several means by using the concept of one way and two way ANOVA.
- Compare the three designs named CRD, RBD and LSD in terms of their efficiencies.

1. **Sample Surveys:**

    SRS Sampling: To draw a simple random sample (SRS) with and without replacements, to obtain an estimate of the population mean along with the estimate of their variances. To compare their efficiency of SRSWOR and SRSWR.

    To draw all the possible samples by SRS technique and then to show that expected value of the sample mean equals the population mean and to find the expected value of S in SRSWOR and in SRSWR.

    Stratified Sampling:

    Estimate the sample sizes by proportional allocation and Neymann's optimum allocation.

Estimate the mean of the population under the above scheme.

Calculation of the sampling variances.

Comparison of efficiencies of the allocation scheme amongst themselves as well as with SRS.

Systematic Sampling:

Systematic sampling and its comparison with SRSS and stratified sampling.

Estimation of mean and variance by ratio method of estimation.

2. **Analysis of variance and Design of Experiments:**

One way and two-way classifications.

Completely Randomised Design (CRD).

Randomised Block Design (RBD) and its efficiency with CRD.

Latin Square Design (LSD) and its efficiency with CRD and RBD.

Project Work:

The candidate is to write a report on some project work based on Primary or Secondary data on any one selected topic with the permission of the Head of the Department.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus of papers I & II may be set in the practical examination.

(ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

(iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

STAT 301 Applied Statistics

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: On completion of the course, the student will be able to:

- Understand the concept of time series data and application in various fields.

- Identify principle sources of demographic data and assess their strengths and weaknesses.

- Understand the calculation and interpretation of the principal demographic measures, and standardize these measures for comparison and construct and interpret life tables.

- Understand the uses of index number with their construction methods.

- Understand the concept of demand and supply theory.

- Understand the concept of scaling of scores.

Unit 1   **Time series analysis:** Components of a time series, Additive and multiplicative models. Methods of determining trend and seasonal components.

Unit 2   **Vital Statistics:** Indices of mortality and fertility, Mortality- Crude and Standardized death rates. Fertility- Crude birth rate, general fertility rate, Gross and Net reproduction rates, Definition, evaluation and uses of above indices, Stable and stationary populations- concept, determination of the rate of increase in a stable populations, Life table: construction of life table from graduated rates of mortality and evaluation of probabilities of survival and death from a life table.

Unit 3   Economic statistics: Meaning and uses of Index Numbers, Problems in construction of Index Numbers, Prices and quantity indices, Fixed base and chain base Index numbers. Weighted and unweighted index numbers-Laspeyre's, Pasche's, Marshel-Edgeworth's and Fisher's ideal Index numbers, Time reversal, factor reversal and circular tests, Base shifting, splicing and deflating.

Construction of cost of living and wholesale price index numbers.

Unit 4   **Educational Statistics:** Statistics in Psychology and Education, Scaling of scores, Standard scores, Normalized scores, T scores, Reliability and validity of test scores, intelligence quotient.

Unit 5   Demand Analysis: Demand and supply, Law of Demand and Supply. Price elasticity of demand, Partial elasticity of demand. Engel's curve and Engel's law, Pareto's law of income distribution.

Note: Use of Scientific calculator is permissible.

Text Books:

1. Gupta, S. C. & Kapoor, V. K. (2000). Fundamentals of mathematical statistics. New Delhi, Sultan Chand & Sons. (for applications)

2. Goon, A.M., Gupta, M.K. & Dasgupta, B.*Fundamental of Statistics.* (Volume.2). The World Press Pvt. Ltd.

Reference Books:

1. Hooda, R.P. Introduction to Statistics. (7th ed.). Macmillan India Ltd.

2. Croxton, F.E. & Cowden, Dudley, J. (1955). Applied General Statistics. (2nd ed.). New York, Prentice-Hall.

STAT 301L Applied Statistics Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: On successful completion of the course, students will be able to,

- Find the trend and seasonal components in the given dataset and separate these components on excel.
- Calculate and interpret the basic demographic measures and compare the measure for two different populations.
- Construct the life table with the help of some given life table columns.
- Calculate the index numbers for different commodities.
- Scaling the scores, test the reliability of these scores and compute the IQ of any individual.

1. (i) Measurement of trend by method of moving averages and curve fitting by least squares.
   (ii) Measurement of seasonal fluctuations by-
       (a) Ratio to trend
       (b) Ratio to moving averages
       (c) Link relative method.

2. Vital Statistics:
   (i) CDR, CBR, Age specific death rates, standardized with and death rates.

    (ii) GFR, ASFR, TFR.

    (iii) Crude rate of natural increase GRR, NRR.

    (iv) Life table and finding out certain values with its help.

3.   Economic Statistics:

    (i) Laspeyre's, Pasche's and Fisher's Index numbers.

    (ii) Fixed base and chain base index numbers.

    (iii) Wholesale price index numbers.

    (iv) Cost of living index numbers.

4.   Educational Statistics: Computation of different scores, reliability of test scores and IQ.

STAT 303 Financial Statistics

Max. Marks : 100   **L T P C**

(CA: 40 + ESA: 60)   **6 0 0 6**

Learning Outcomes: On completion of the course, the students will be able to,

- Understand acquisition of financial data
- Describe financial data using distributions
- Find relation between two or more financial series
- Understand the concept of stochastic process
- Apply basic stochastic models in financial data.

Unit 1 Essential practical familiarization with financial data. Typical challenges with real financial data. Basics on data acquisition, manipulation, filtering, graphical representation and plotting.

Unit 2 Statistical distribution of returns. Moments of the distribution. Non-Normal distributions and fat-tails. Large fluctuations and tail risk. Stable distributions. Generalized extreme value distribution. Estimation methods to characterize the tails of the distributions. Calibration and validation. Applications to measures of risk.

Unit 3 Measures of dependency: linear and non-linear correlations. Lagged correlations and causality. Information theoretic perspective: mutual information, transfer entropy. Spurious correlations. Correlation filtering through networks. Calibration, validation and application issues.

Unit 4 Stochastic Process: Concept, types, properties. Discrete Stochastic Processes, Binomial processes, Gaussian Process. Random walk, General random walks, Geometric random walks, Binomial models with state dependent increments.

Unit 5 Stochastic Models in Finance: Discrete time process- binomial model with period one. Stochastic Models in Finance: Continuous time process- geometric Brownian motion.

Suggested Readings:

1. Franke, J., Hardle, W.K. And Hafner, C.M. (2011): Statistics of Financial Markets: An Introduction, 3rd Edition, Springer Publications.

2. Stanley L. S. (2012): A Course on Statistics for Finance, Chapman and Hall/CRC.

3. Casella G. & Berger R. L. (2002). *Statistical Inference*, Brooks/Coles.

4. Bouchaud, J.- P. & Potters, M. (2003). *Theory of Financial Risk and Derivative Pricing: from Statistical Physics to Risk Management*, Cambridge University Press.

5. Lehmann, E. L. & Romano, J. P. (2006). *Testing Statistical Hypotheses*, Springer, 2006.

Reference Books

1. Coles, S. (2001). *An Introduction to Statistical Modeling of Extreme Values*, Springer.

2. Gumbel, E. J. (2013). *Statistics of Extremes*, Echo Point Books & Media.

STAT 303L Financial Statistics Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: On completion of this course, the students will be able to,

- Understand the behavior of financial data through graphs
- Describe the nature of financial data
- Calculate risk through financial data
- Find relationship between financial series
- Model financial data using some simple stochastic models.

List of Practical (Using spreadsheet/ R)

1. Graphical representation of financial data
2. Fit non-normal distributions to financial data
3. Obtain characteristics of the distribution
4. Find measures of risk
5. Measure relationships between financial series.
6. Apply stochastic processes for a financial data

STAT 304 Health Statistics and Population Dynamics

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: On completion of this course, the students will be able to,

- Understand different measures related to health statistic,
- Calculate morbidity measures,
- Identify principle sources of demographic data and assess their strengths and weaknesses.
- Discuss the demographic significance of age and sex structures and the implications of variations in age & sex structure.
- Construct and interpret life tables.
- Calculate and interpret of the principal demographic measures, and standardize these measures for comparison.
- Understand the components of population change, including the effects of changing birth, death and migration rates, and demonstrate their influences on age structure.
- Estimate and project the population by different methods.

Unit 1 Health statistics: Introduction, utilization of basic data, sources of health statistics, problems in the collection of sickness data, measurement of sickness, hospital statistics and the international classification of diseases, different measures: incidence rates, prevalence rate, attack rate, case fatality rate. Measures of accuracy or validity, sensitivity index, specificity index.

Unit 2 Sources of demographic data in India: census, vital events, registration, survey, extent of under registration, Population

pyramids and its use. Population growth rates: arithmetic, geometric and exponential growth rates, population estimation and projection.

Unit 3 Mortality and its measures: Crude, direct and indirect standardization of death rates, age specific death rate, infant mortality rate, neo- natal mortality rate, definitions and their evaluation.

Fertility and its measures: CBR, ASBR, measures of reproduction: GFR, TFR,GRR, NRR, cohort fertility analysis.

Unit 4 Measures of migration crude, specific and standardized rates survival ratio and national growth rate method.

Urbanization - Growth and distribution of rural - urban population in developed and developing countries.

Unit 5 Life tables and their application: construction of complete and abridged life tables and their interrelationship, force of mortality, evaluation of probabilities of survival and death from life table.

Text Books

1. Rao, P.S.S. Sundar, & Richard, J. (2004). *An introduction to Biostatistics (A manual for students in health sciences)*, Prentice Hall of India, Pvt. Ltd.

2. Misra, B.D. (2004). *An introduction to the study of population,* South Asian Publishers Pvt. Ltd.

3. Ramkumar, R. (2006). *Technical Demography*. New Age International.

4. Pathak, K.B. & Ram, F. (2019). *Techniques of Demographic Analysis* (2nd. ed.). Himalaya Publishing House.

Reference Books

1. Keyfitz, N. (2013). *Applied Mathematical Demography*, New York: John Wiley.

2. Bhinde, A. A. & Kanitker, T. (2018). *Principles of Population Studies* (19th. ed.). Himalaya Publishing House.

Suggested E- Learning Material

1. Demographic data; Platform: National Family Health Survey, India http://rchiips.org

2. Population Studies; Platform; e-PG Pathshala https://epgp.inflibnet.ac.in

3. Demography ; Platform: University Library - The University of Adelaide
https://www.adelaide.edu.au/library/

4. Demography; Platform: MITOPENCOURSEWARE https://ocw.mit.edu/index.htm

STAT 304L Health Statistics and Population Dynamics Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: On completion of this course, the students will be able to:

- Calculate various measures of morbidity and their accuracy
- Construct population pyramid and identify its features
- Estimate population growth rates and project for future
- Calculate measures of mortality and fertility for a given population
- Calculate simple measures of life table and analyze it.

List of Practicals

1. Measures of morbidity
2. Measures of accuracy or validity, sensitivity index, specificity index
3. Construction of population pyramid
4. Population growth rate
5. Measures based on mortality
6. Measures based based on fertility
7. Construction of Life table

Computer Applications

First Semester

CS 106 Computer Fundamentals

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes : On successful completion of the course students will be able to:

- Knowledge of component of computer.
- Convert numbers in binary, octal, hexadecimal, and vice versa including binary arithmetic
- Simplify Boolean expression Draw electronic circuits.
- Devise Algorithm and draw flowchart for Searching, sorting, merging through computer

Syllabus

Unit 1 Introduction to Computer System: Simple model of Computer, CPU, Memory, Storage media and I/O units, Software (System and Application) and Hardware. Introduction of operating system. Booting process and DOS commands (Internal and external).

Unit 2 Number System: Data representation - binary, octal, hexadecimal and their inter conversion, positive and negative numbers, integers and real, characters and codes - BCD, ASCII and EBCDIC coding, Binary arithmetic(addition and subtraction)

Unit 3 Basic concepts of Boolean algebra and their electronic implementation, Logic gates (AND, OR, NOT, NOR, NAND) and truth table, De-Morgan's theorem, simplification of Boolean expression.

Unit 4 Algorithms and Flowcharts : Problem analysis, algorithm design, data assignments, flowchart design, stepwise refining, sequencing, alternation and Looping.

Unit 5 Implementation of Algorithms and Flowcharts : Searching (Linear, binary), Sorting (Bubble and Selection) and merging, Programming languages and problem solving computers.

Suggested Books :

1. Sinha, P. K. (2003). Computer fundamentals: concepts, systems & applications. BPB publications.

2. Wirth, N. (1976). Algorithms+ Data Structures= Programs Prentice-Hall Series in Automatic Computation. Prentice Hall.

3. Norton, P. (1989). Peter Norton's DOS guide. Brady.

4. Ram, B. (2000). Computer fundamentals: architecture and organization. New Age International.

5. Govil R. Computer Anuprayog avam Programmingt,et al, Jaipur publishing house, 2000.

6. Dromey, R. G. (1982). How to Solve it by Computer. Prentice-Hall, Inc..

7. Saxena M. Disk Operating System, Pitamber publication, 1994

Suggested E-Resources:

1. Sinha, P. K. (2003). Computer fundamentals: concepts, systems & applications. BPB publications.

   https://www.edutechlearners.com/computer-fundamentals-p-k-sinha-free-pdf/

MATH 105 Elements of Mathematics

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course students will be able to:

- Determine the particular progression work (AP, GP, HP)
- Demonstrate the determinant of a matrix up to third order.
- Identify function and relations, notations, operations and applications of sets.
- Locate the quadrant in Cartesian plain.
- Recognize real-world problems that are amenable to mathematical analysis, and formulate mathematical models of such problems.

Unit 1 Number system, GCD, Progression: AP, GP & HP: Sum of n terms in AP and GP, arithmetic, geometric, harmonic means between two numbers, sum of an infinite series in GP (excluding arithmetic- geometric series). Logarithms: Definition, laws regarding product, quotient, exponent and change of base.

Unit 2 Matrix: definition, order, types(rectangular, square, row, column, triangular, diagonal, unit, null), conjugate, transpose, symmetric and skew- symmetric, hermitian and skew-hermitian, matrix addition, subtraction and multiplication, determinant, properties of

determinants (without proof), evaluation of determinants up to third order.

Unit 3 Binomial theorem for positive integral index, number of terms in binomial expansions, general and middle terms of binomial expansion, coefficient for a given index (exponent), term independent of variable, introduction to mathematical induction.

Unit 4 Sets, operations on sets (union, intersection, complements), De Morgan's laws, inclusion – exclusion principle and its applications, relations (binary, m-ary), equivalence relations, equivalence classes, partitioning of a set, partial order relations.

Unit 5 Geometrical interpretation of functions-Linear function (straight line: concept of slope, parallel and perpendicular lines, point of intersection of two lines), Quadratic function: circle, conic section: (concept of eccentricity, focus, directrix, axis, double foci).

Text Books: -

1. Sharma, G.C.and Jain, Madhu: Essential Mathematics, Galgotia Publication Pvt. Ltd., New Delhi, 2001

Reference Books: -

1. Pulsinelli, Linda & Hooper, Patricia: Essential Mathematics, McMillan, New York, 1991.

2. Mittal, S.K. & Agarwal, D.C.: Basic Mathematics, 3rd Edition, Pragati Prakashan, Meerut, 1983.

3. Lerro, P. Joseph: Basic Mathematics, Cahners Books, Boston, C. 1977.

Suggested E-learning material:

1. Sequence and Series:

    http://mycatguide.yolasite.com/resources/sequence.pdf

2. Matrix:

    https://www.hec.ca/en/cams/help/topics/Matrix_determinants.pdf

3. Binomial Theorem: http://ncert.nic.in/ncerts/l/keep208.pdf Set:

    http://ncert.nic.in/ncerts/l/keep201.pdf

4. Function & Relation:

    http://ncert.nic.in/ncerts/l/keep202.pdf

Second Semester

CS 110 Computer Programming

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**6**	**0**	**0**	**6**

Learning Outcomes : On successful completion of the course students will be able to :

- develop the ability to write, compile and debug programs in C language and use different data types for writing the programs.
- formulate the programs based on structures, loops and functions.
- conceptualize the understating of differentiating between call by value and call by reference.
- develop the conceptual understanding of the dynamic behavior of memory by the use of pointers.

Syllabus

Unit-I Introduction to computer programming, , Programming languages (high level, low level), Compiler, Interpreter.Computer Programming (in C): Overview of C language- History, Character set, Identifiers, Various Data types (Simple and Structured) and their representation, Constants and Variables, Operators (arithmetic, logical, relational), Program structure, Data assignment, Input-Output statements,

Unit-II Arithmetic and Logic expressions, Control statements (sequencing, alteration and looping),

Unit-III Single & Multi-dimensional Arrays, and Searching and Sorting: Linear search and Binary Search, Bubble sort, Selection sort, Insertion sort, merging and matrix manipulation

Unit-IV Functions, parameter passing (call by value, call by reference), recursion, storage classes.

Unit-V Concept of pointers, pointer expression, pointer v/s arrays, structure, union and enumerated data types, command line arguments, concept of structured programming.

Suggested Books:

1. Sinha, P. K. (2003). Computer fundamentals: concepts, systems & applications. BPB publications.

2. Balagurusamy, E. (2012). Programming in ANSI C. Tata McGraw-Hill Education.
3. Venugopal, K. R. (1997). Programming with C. Tata McGraw-Hill.
4. Kernighan, B. W. & Ritchie, D. M. (2006). The C programming language.
5. Kanetkar, Y. P. (2016). Let us C. BPB publications.
6. Gottfried, B. (1996). Programming with C, Schaum's Outlines.

Suggested E-Resources:

1. Introduction to Programming in C
    https://nptel.ac.in/courses/106104128/
2. Introduction to Programming in C Specialization
    https://www.coursera.org/specializations/c-programming
3. Sinha, P. K. (2003). Computer fundamentals: concepts, systems & applications. BPB publications.
    https://www.edutechlearners.com/computer-fundamentals-p-k-sinha-free-pdf/

CS 110L Computer Programming Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Lab Number	Problems
	C programming
L1-L2	Simple hands on computers and DOS Commands e.g. CD, MD, RD, COPY/TYPE etc.
L3	Formula Based Problems using Variables declaration and Constants.
L4	Assignment Statement with INTEGER. REAL. CHARACTER and BOOLEAN type variable and use of operators. Library Functions e.g. SQRT. SIN. COS, LOG, SUCC, PRF. D.ORD etc.
L5-6	Simple Problems Using scant and printf functions. Formula Based Problems using Constants, Variables and use of operators. Library Functions.
L7-10	Loop Statement using for, while, do -while statement

LI 1-12   Conditional Checking Using if statement. Nested if statement, switch statement and Unconditional goto

LI 3-16   Problems based on array data types. Problems on One Dimensional Array-Searching (Linear, Binary).

Sorting (Bubble. Selection, Insertion), Merging.

LI 7-19   Problems on two Dimensional Array. Matrix Operation: Addition, Subtraction, Multiplication etc

L20-22   Problems based on pointers. Parameter passing in functions. Recursion

L23-25   'Declaration. Reading. Writing and manipulation on structure and union data type

L26-28   File handling. Command Line Arguments

Third Semester

CS 210 Data Structures

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: On successful completion of the course students will be able to:

- Choose appropriate data structure as applied to specified problem definition.
- Handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.
- Use linear and non-linear data structures like stacks, queues , linked list etc.
- Understand Internal representation of Linear and nonlinear data structures.

Syllabus

Unit 1   Concept of Data types, Abstract data type and data structure, Running time of program, Complexity of algorithm, Asymptotic notations: Big-Ω, Big-O, Big-θ notation) Searching and Sorting: Linear search and Binary Search, Bubble sort, Selection sort, Insertion sort, Quick sort, Radix sort.

Unit 2 Liner Data structures : Stacks, Queues and their types, their array and linked list implementations, applications of stacks & queues, recursion stacks and recursive procedures

Unit 3 Linear Linked structures: Single Linked Lists ,Doubly & Circular Linked Lists, simple applications. Representation of polynomial using linked list, addition and subtraction of polynomials.

Unit 4 Nonlinear structures: Tree concepts, General Tree, binary tree and types and their applications. Binary Search Tree: implementation of various operations on Binary Search Tree (tree traversal, searching, insertion and deletion, counting leaf and non-leaf nodes, height).

Unit 5 Heap and heap sort, Balanced tree: Introduction and concepts.Graph: Introduction, Graph Theory terminology, Sequential representation of graphs: Adjacency Matrix, Path Matrix, Linked Representation of graph, Graph traversal: DFS, BFS.

Note : Data structures to be implemented using C/C++.

Suggested Books:

1. Ullman, J. D., Aho, A. V., & Hopcroft, J. E. (1974). The design and analysis of computer algorithms. Addison-Wesley, Reading, 4, 1-2.

2. Tremblay, J. P., & Sorenson, P. G. (1976). An introduction to data structures with applications. McGraw-Hill Computer Science Series, New York: McGraw-Hill, 1976..

3. Knuth D.E., Fundamental Algorithms (The Art of Comp. Prog. Vol. Narosa Publishing House, New Delhi

4. Horowitz, E. (2006). *Fundamentals of data structures in C++*. Galgotia Publications.

5. Tenenbaum, A. M. (1990). *Data structures using C*. Pearson Education India.

6. Kruse, R., & Tondo, C. L. (2007). *Data structures and program design in C*. Pearson Education India.

7. Lipschutz, S. (1987). *Schaum's Outline of Data Structure*. McGraw-Hill, Inc.

Suggested E-Resources:

1. Programming and Data Structures

https://swayam.gov.in/course/1407-programming-and-data-structures

2. Data Structures and Program Methodology
   https://nptel.ac.in/courses/106103069/

CS 210L Data Structures Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Lab no.	**Problems**
L1-L4	Programs on Searching and Sorting: Linear search and Binary Search, Bubble sort, Selection sort, Insertion sort, Quick sort, Radix sort.
L5-L6	Programs based on static implementation of stacks.
L7-L8	Programs based on static implementation of queues.
L9-L13	Programs based on dynamic implementation of stack and its applications.
L14-L17	Programs based on dynamic implementation of queue and its applications.
L18-L27	Programs based on Singly, Doubly & Circular Linked lists. Operations on linked lists like: creation, insertion, deletion, traversal, searching etc.
L28-L40	Operations on Binary tree, binary search tree.
L41-L45	Simple programs on representation of graphs and their traversal.

IV Semester

CS 201 Application Software and Visual Computing

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Course Outcomes:

On successful completion of the course students will be able to

- Exposure of the features of the MS-Word including Editing files, Basic formatting features, Page setup, Inserting and formatting objects, Tables and Mail-merge.
- Hands on features of the MS-Excel including Functions, Formulas, References, Filters, Validation, Solver and Pivot tables.

- Apply MS- Power point including Presentation, Chart, and Data Tables.

- Introduce features of VB.NET supporting visual and object oriented programming

- Explain the relative merits of VB.NET in .NET framework as an object oriented and visual programming language

- Show how to produce software with rich graphics as a user interface using VB.NET.

- Introduce advanced features of VB.NET specifically RAD, ADO.NET etc

Syllabus

Unit 1 Concept of System software and application software, Windows, Desktop Publishing and Office Automation (Ms-Word : Introduction, Editing files, Basic formatting features, Page setup, Inserting and formatting objects, Tables, Mail-merge, Excel: Fundamentals, Functions, Formulas, References, Filters, Validation, Chart, Data Tables, Goal Seek, Scenario, Solver, Pivot tables. PowerPoint: Creating and Formatting a presentation, Animation, Inserting Pictures, Sound, Table, Chart etc, Running and Printing a slide)

Unit 2 Introduction to Data Base, Concept and Architecture of database, Ms-Access Table: Designing and Creation, data types and relationships between tables, Query: Select, Update, Delete, Create table, Crosstab, Parameterized queries and Report generation

Unit 3 **Introduction to .NET framework :** Managed Code and the CLR- Intermediate Language, Metadata and JIT Compilation - Automatic Memory Management.

Language Concepts and the CLR: Visual Studio .NET - Using the .NET Framework.

The Framework Class Library: .NET objects - ASP .NET - .NET web services – Windows Forms

Unit 4 **Elements :** Variables and constants – data types – declaration. Operators – types – precedence. Expressions. Program flow – Decision statements – if .. then, if..then..else, select..case– Loop statements – while..end while, do..loop, for..next, for..each..next.

Types: Value data types – Structures, Enumerations. Reference data types- Single-dimensional – Multi-dimensional arrays – jagged arrays – dynamic arrays

Windows programming: Creating windows Forms – windows controls – Button, Check box, Combo box, Label, List box, Radio Button, Text box. Events – Click, close, Deactivate, Load, Mousemove, Mousedown, MouseUp.

Menus and Dialog Boxes:Creating menus – menu items – context menu - Using dialog boxes – showDialog() method, APPLICATION DEVELOPMENT USING ADO .NET

Unit 5   **Features of ADO.NET:** Architecture of ADO.NET – ADO.NET providers – Connection – Command – Data Adapter – Dataset.
Accessing Data with ADO.NET: Connecting to Data Source, Accessing Data with Data set and Data Reader - Create an ADO.NET application - Using Stored Procedures.

Suggested Books:
1. Govil R. et al, *PC Software*, New Delhi:BPB
2. Robinson, C. (1999). *Access 2000: No Experience Required*. SYBEX Inc..
3. Deitel, H. M., Deitel, P. J., & Nieto, T. R. (2001). *Visual Basic. Net with Cdrom*. Prentice Hall PTR.
4. Platt, D. S. (2002). *Introducing Microsoft. Net*. Microsoft press.
5. Esposito, D. (2011). *Programming Microsoft ASP. net 4*. Pearson Education.
6. *Developing XML Web Services Using Microsoft® ASP.NET - Microsoft*- Microsoft Press
7. Reilly, D. J. (2002). *Designing microsoft asp. net applications*. Microsoft Press.
8. Ryan, D., & Ryan, T. (2001). *ASP. NET: Your Visual Blueprint for Creating Web Applications on the. Net Framework*. John Wiley & Sons, Inc..

Suggested E-Resources:
1. W3Schools website
   https://www.w3schools.com/asp/
2. Grundgeiger, D. (2018). *Programming Visual Basic. NET*. O'Reilly.
   https://www.visualchart.com/ContentManagement/Development/Manuals/EN/vbNet_programming.pdf

CS 201L Application Software and Visual Computing Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Lab Number   Problems

L1-L3   **Microsoft Word** (Document creation & formatting. Grammatical & Spelling checking. Table handling. Find & Replace. Mail Merge, Macro. Document with multiple columns. Templates, OLE)

L4-L6   **Microsoft Excel** (Creation of Workbook, Entering data in multiple sheets. Cell referencing. Drawing different type of charts, Functions-Date& time. Mathematical, Statistical. Look up & text,)

L7-L10   **Microsoft Excel Contd.** (Creation of Pivot table. Filtering, validation and Sorting, Extra features of Excel such as Freezing, protection etc of sheets)

L11-L20   **Microsoft Access** (Familiarity with environment. Creation of tables using design. Wizard & Entering Properties - General and Local. Query Design view- Insert, Update, delete. SQL view, Relationship between tables. Designing of Forms, Designing of Reports)

L21-L26   **Introduction of VB.NET framework IDE** (Exploration of IDE (Tool box, menu bar. Project Explorer etc.). Simple programs to print messages on form, text box. label etc. Form Load Event, Change property of form. text box, label etc. Formula based problems i.e. Addition of two numbers etc. (At least 10 different types of problems))

L27-L40   **VB.NET Programming** (Problems based on Conditional constructs (if@then@else. select case etc.) (At least 10 different types of problems). Problems based on looping constructs (while@wend, tor-next) (At least 10 different types of problems) eg. Star patterns, series etc. Picture box, image box, shape control. (Animation type problems). Problems based on List Box & Combo Box (adding items, deleting items, display index etc.). Problems based on Arrays, Creating different types of arrays. Usage of array functions.   Procedures (Function, Sub Routines), Parameter passing, Swapping.

L41-L45 **Project Work:** Designing Menus (MDI. SDI). Form handling using GET. POST, Use of Request and Response Objects. Creation of sessions. Creation of Cookies. Creating web page using QuervString and Hidden Field. Database Connectivity with (Data Control ADO.NET Control, Connection String. Command Object. Connection Object etc.)

V Semester VI Semester

Discipline Electives

CS 303 Database Management Systems

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: On successful completion of the course students will be able to:

- Describe data models and schemas in DBMS
- Learn the features of database management systems and Relational database.
- Use SQL-the standard language of relational databases.
- Learn the functional dependencies and design of the database.
- Learn the concept of Transaction and Query processing.

Unit 1 Data Information and related concepts, Database system architecture, History, design, function, structure Data models schema and instances, Data independence and database languages, DBMS Vs file Organization.Classical data management: classical data models (relational, hierarchical and network)

Unit 2 ER modeling: concepts, notation for ER diagrams, mapping constraints, Keys, Concept of super key, candidate key, primary key, Generalization, Aggregation, reducing ER diagrams to tables, extended ER model, Relationship of higher degree.

Unit 3 Relational Data Model and Language: Relational data model concepts, relational algebra, SQL, DDL, DML & DCL commands, integrity constraints, Example DBMS System (Oracle 9i) : Basic architecture, data definition and data manipulation, PLSQL, cursors, triggers, stored procedures.

Unit 4   Database design : Functional dependencies, Normalization: first to fifth normal forms, Advanced DBMS concepts: Data integrity and reliability, consistency, security, privacy and authentication aspects in data bases

Unit 5   Transaction processing concepts. Concurrency control techniques, locking techniques, and time stamping , Management of deadlock and crashes Distributed data base: Introduction, advantages, DBMS Vs DDBMS, distributed system structure, data fragmentation, homogeneous VS heterogeneous systems, Distributed query processing. Distributed data storage. Distributed transactions.

Suggested Books:

1.   Silberschatz, A., Korth, H. F., & Sudarshan, S. (2016). *Introduction to Data base Management System.*

2.   Date, C. J. (1990). *An introduction to database systems. Volume 1*.

3.   Elmasri, R., & Navathe, S. (2003). *Fundamentals of Database Systems* Addison Wesley. Reading, MA.

4.   Majumdar & Bhattachrya, *Database Management System*, Tata McGraw-Hill

5.   Ramakrishna, Gehkre, *Database Management System*, Tata McGraw- Hill

6.   Leon, A., & Leon, M. (2010). *Database management systems*. Vikas Publishing House Pvt. Limited.

7.   Ullman, J. D. (1984). *Principles of database systems*. Galgotia publications.

8.   Shah, N. (2016). *Database Systems Using Oracle*. Pearson Education India.

9.   Gupta, P. K. D., & KRISHNA, P. R. (2013). *Database management system Oracle SQL and PL/SQL*. PHI Learning Pvt. Ltd..

10. Martin, J. (1977). *Computer database organization*. Prentice Hall PTR.

Suggested E-Resources:

1.   Data Base Management System
     https://nptel.ac.in/courses/106105175/
2.   Database Management Essentials
     https://www.coursera.org/learn/database-management

3. Silberschatz, A., Korth, H. F., & Sudarshan, S. (1997). *Database system concepts*. New York: McGraw-Hill.

   https://kakeboksen.td.org.uit.no/Database%20System%20Concept s%206th%20edition.pdf

CS 303L Database Management Systems Lab

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Lab Number	Problems
L1-L3	Look and feel of DBMS (ORACLE/SQL Server)
L4-L5	DDL commands (create. Alter, drop)
L6-L9	DML commands (Insert. Update, delete)
L10-L15	SQL (basic constructs)
L16-L18	SQL (aggregate functions, set membership functions, set operators)
L19-L21	Nested Sub-queries
L22-L30	A small project comprising of table, query, form and report.

CS 320 Programming in JAVA

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: On successful completion of the course students will be able to:

- Apply Object oriented features to program design and implementation.
- Explain object-oriented concepts and describe how Java including identifying the features and peculiarities of the Java programming language supports them.
- Use Java to demonstrate practical experience in developing object-oriented solutions using graphical components.

Syllabus

Unit 1 Object Oriented Paradigm, Concepts of Object Oriented Programming (Objects and Classes, Data Abstraction and Encapsulation, Inheritance, Polymorphism, Dynamic Binding, Message Communication), Benefits of Object Oriented Programming, Applications of Object Oriented Programming,

Procedural v/s Object Oriented Programming, Java History, Java Features, Comparison between Java and C++, Java Virtual Machine (JVM), Java Runtime Environment (JRE), Java Development Kit (JDK), Structure of Java Program, Java Tokens (Java Character Set, Keywords, Identifiers, Literals, Operators, Separators), Constants, Variables, Data Types, Scope of Variables, Type Conversion & Casting, Automatic Type Promotion, Operators (Arithmetic, Relational, Logical, Assignment, Increment and Decrement, Conditional, Bitwise, Special), Operator Precedence, Expressions, Branching (if, if…else, Nested if…else, else if ladder, switch, ? : operator), Looping (while, do…while, for), Jumps in Loops (break, continue), Labeled Loops

Unit 2 Classes, Objects and Methods, Constructors, this Keyword, Garbage Collection, finalize( ) Method, Overloading Methods, Objects as Parameters, Returning Objects, Recursion, Access Specifiers (default, private, protected, public), static Keyword, final Keyword, Nesting of Methods, Nested and Inner Classes, Command-Line Arguments, Arrays, One-Dimensional Arrays, Two-Dimensional Arrays

Unit 3 Inheritance, Super Class, Sub Class, Visibility Controls, super Keyword, Types of Inheritance (Single, Multilevel, Hierarchical), Method Overriding, Dynamic Method Dispatch, final with Inheritance, Abstract Methods and Abstract Classes, Object Class, Interfaces (Defining, Extending, Implementing), Packages, Standard Java Packages, Programmer-Defined Java Packages (Creating, Accessing), CLASSPATH, Access Protection

Unit 4 String and StringBuffer Classes and their Methods, Wrapper Classes, Vector Class, Types of Errors (Compile Time Errors, Run Time Errors), Exceptions, Checked and Unchecked Exceptions, Handling Exceptions (try, catch, finally, throw, throws), Programmer-Defined Exceptions, Multithreading, Creating Threads (Extending Thread Class, Implementing Runnable Interface), Life Cycle of a Thread, Thread Exceptions, Thread Priority, Synchronization

Unit 5 World Wide Web, Web Browser, HTML, Basic Features of HTML, HTML Tags, Applets v/s Stand Alone Applications, Creating and Executing Small Applets, GUI Components, Graphics Class, Lines and Rectangles, Circles and Ellipses, Arcs, Polygons, Delegation Event Model, AWT and its Basic Controls,

Layout Managers (FlowLayout, BorderLayout, GridLayout, CardLayout)

Suggested Books:

1. Bhave, M. P., &Patekar, S. A. (2009). *Programming with Java.* Pearson Education.

2. Kahate, *Java Programming.* Oxford

3. Balagurusamy, E., & Hirshfield, S. (2000). *Programming with java*. Tata McGraw-Hill.

4. Mughal, K. A., & Rasmussen, R. W. (2016). *A Programmer's Guide to Java SE 8 Oracle Certified Associate (OCA*). Addison-Wesley Professional.

5. Arnold, K., Gosling, J., & Holmes, D. (2005). *The Java programming language*.Addison Wesley Professional.

6. Zukowski, J. (1998). *Mastering Java 2*. SYBEX Inc..

7. Deitel, P., &Deitel, H. (2011). *Java How to program*. Prentice Hall Press.

8. Horstmann, C. S., & Cornell, G. (2002). *Core Java 2: Volume I, Fundamentals*. Pearson Education.

9. Schildt, H. (2007). *Java: the complete reference*. McGraw-Hill.

Suggested E-Resources:

- Java Lectures
  https://www.cse.iitb.ac.in/~nlp-ai/javalect_august2004.html
- Object Oriented Programming in Java Specialization
  https://www.coursera.org/specializations/object-oriented-programming

CS 320L Programming in Java Lab

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**0**	**0**	**4**	**2**

Lab Number	Problems
L1	Display the given information in a given format using Sequential statements
L2-L3	Problems based on arithmetic, logical, relational and bitwise operators such as the following programs
L4-L6	Problems based on Conditional Statements (if, if.. else, switch, goto, labeled continue, labeled break)

L7-L10	Problems based on conditional and unconditional loop (For, While, Do…While)
L11-L13	Problems based on single and multidimensional Arrays
L14-L19	Problems based on object oriented concepts (class)
L20-L23	Problems based on Inheritance
L24-L29	Problems based on Package and Interface
L30-L32	Problems based on Wrapper Class
L33-L35	Problems based on Exception handling
L36-L41	Problems based on I/O Stream
L42-L47	Problems based on String class and its methods
L48-L50	Problems based on Applet
L51-L54	Problems based on Graphics(GUI component)
L55-L60	Problems based on Event Handling

CS 307 Multimedia and Web Designing

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**6**	**0**	**0**	**6**

Learning Outcomes: On successful completion of the course students will be able to:

- Design and develop a static and dynamic website

- Use java script to add dynamic content to website.

- Analysis the various latest interactive multimedia devices and the basic concepts about images and image format.

- Discuss various multimedia tools like Photoshop, Flash.

- Students will be able to design interactive multimedia software using multimediatools(Photoshop, Flash) and web programming languages(HTML, CSS, Java Script,PHP)

Syllabus

Unit 1 Multimedia: Introduction, Main elements, Need, Benefits, Multimedia devices, Applications, Concept of virtual reality. Photoshop: Image editing tools, Layers, Channel & Masks. Introduction to Flash.

Unit 2 Web Development: Internet and History of Internet, Internet Connection methods, Basic services, WWW, Concept of Web browser, Web document, Web server, DNS Basics of Web site design, Characteristics of good website, Publishing & Registering websites, Introduction to Internet Service Providers & Search Engines.

Unit 3   HTML : Introduction to HTML, structure of HTML code, various tags, Frames, creating link in Web pages, Forms, CSS, HTML DOM, XML : Introduction, structure, XML Markup, Viewing XML document (using CSS, DOM), Embedding multimedia contents to the web.

Unit 4   DHTML, **JavaScript** : Introduction, Basic: syntax, data types, variables, Expression, operator, Control structure, Loops: while, do while, for, Functions.

Unit 5   **PHP:** Introduction, Basic: syntax, data types, variables constant, PHP Expression, operator, Control structure, Loops, Functions: Syntax, Arguments, Variables, References, Pass by Value & Pass by references, Return Values, Variable Scope,Array, Form handling, State management: QueryString, Cookies, Session Handling. Database Connectivity.

Suggested Books:

1. Ray, D. S. Mastering HTML 4.0, 1997. Sybex, San Francisco, CA, USA.

2. Bayross, I. Web Enabled Commercial Application Development by using HTML, Java Script, DHTML and PHP.

3. Reinhardt, R. (2004). Flash Mx 2004 Action Script Bible. John Wiley & Sons.

4. Bangia, R. (2004*). Multimedia and Web Technology*. Firewall Media.

5. Alexis, L., & Mathews, L. (1997). *Internet for everyone*.

6. Wirasinha, A. (2002). *Flash in a Flash: Web Development*. Prentice-Hall of India.

7. Jeffcoate, J. (1995). *Multimedia in practice: technology and applications*. Prentice-Hall, Inc..

8. Holzner, S. (2007*). PHP: the complete reference*. Tata McGraw-Hill Education.

Suggested E-Resources:

1. W3Schools website
   https://www.w3schools.com/

2. Internet Technology
   https://nptel.ac.in/courses/106105084/13

CS 306L Multimedia and Web Designing Lab

Max. Marks : 100 **L T P C**
(CA: 40 + ESA: 60) **0 0 4 2**

Lab No.	Problems
L1-L2	Create a page with HTML basic tag like. Paragraph, formatting, inserting image
L3	Create different types of list using HTML
L4	Create pages with internal and external linking using HTML
L5-L6	Create different types of tables using HTML
L7	Create different types of image maps using HTML
L8-L9	Create pages with different frame formats using HTML
L10-L11	Create pages using HTML Form. CSS Introduction
L12	Types of CSS. Designing a web page using Font Tables and Link, border in CSS
L13-L14	Java Script Introduction, Use of data types, variables, constant. Expression, operator in Java Script
L15-L16	Use of conditional statements in Java Script
L17-L18	Use of looping statements in Java Script
L19	Java Script functions
L20-L21	Introduction to XML, XML Structure, Viewing XML using CSS
L22-L23	PHP Introduction, Use of data types, variables, constant. Expression, operator
L24	Use of conditional statements in PHP
L25	Use of looping statements in PHP
L26-L27	Creating different types of arrays
L28	Usage of array functions
L29-L30	Creating user defined functions. Functions Call by value and call by reference
L31	Form handling using GET. POST
L32	Creation of sessions
L33-L34	Creation of Cookies and Creating web page using OueryString
L35-L37	Database Connectivity, ADD. DELETE, UPDATE and VIEW data from database

L38-L39	Photoshop basic Environment and Layer, Selection images in Photoshop
L40-L41	Retouching and repairing images in Photoshop, Masking effect
L42-L43	Flash basic Environment, Toolbar, Layer, Frame, Symbol etc.
L44-L45	Creating a different type of animation using Flash

CS 323 Web Development and .NET Framework

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: On successful completion of the course students will be able to:

- Develop working knowledge of C# programming constructs and the .NET Framework architecture.
- Develop, implement and create Applications with C#.
- Build and debug well-formed Web Forms with ASP. NET Controls
- Use of XML in ADO.NET and SQL server.

Unit - I Introduction to .NET Framework, CLR, MSIL, Metadata, Namespaces, Console Applications using .NET Framework, C# Programming: Introduction, Tokens, Data Types, Variables, Operators, Control Statements, Methods, Arrays, String, Structures, Enumerations.

Unit II Object Oriented Programming in C#, Classes and Objects, Encapsulation, Polymorphism, Inheritance, Interfaces and Collections, Properties, Exceptions Handling, Garbage Collector, Operator Overload Conversions Operators.

Advance C#: Delegates, Events. Advance C# type Construction, Indexers, Generics, Threading, File Handling.

Unit III Web Development: Basic Concept of Client-Server Architecture, Elements of Web, Website Design Phases, Characteristics of good Website, HTML, CSS, Client Side and Server Side Coding, Introduction to Scripting Languages (JavaScript, VBScript), Client-Side Validations.

Unit IV Web Application Development using ASP.NET with C#: Web Application in ASP.NET, IIS and Development Server, Migrating ASP Web Application to ASP.NET, Working with HTML

Controls, Server Controls, Validation Controls, Working with Classes and Dynamic Link Library (DLL), Master Page, State Management in ASP.NET, Data Binding.

Unit V Data Management with ADO.NET, Creating & Consuming XML Web Services, Navigation, Localization, Security, Packaging and Deploying ASP.NET Web Application. Introduction to AJAX.

Suggested Books:

1. Schildt, H. (2008). *C# 4.0: The Complete Reference*. Tata McGraw-Hill.

2. Sklar, J. (2010). *Textbook of Web Design*. Publisher Course Technology.

3. Evjen, B., Hanselman, S., & Rader, D. (2008). *Professional ASP. NET 3.5 in C# and VB*. Wrox Publication.

4. *C# 2008 Programming: Covers .NET 3.5 (Black Book)*, Dreamtech Press.

5. Troelsen, A. (2007). *Pro C# With. Net 3.0*. Aprèss Publication, 2007

Suggested E-Resources:

1. W3Schools website

   https://www.w3schools.com/xml/

2. HTML, CSS, and Javascript for Web Developers by Johns Hopkins University

   https://www.coursera.org/learn/html-css-javascript-for-web-developers

3. Internet Technology

   https://nptel.ac.in/courses/106105084/

CS 323L Web Development and .Net Framework Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Lab Number   Problems

L1-L2   Introduction to Visual Studio .NET

L3-L4   Create, Debug & Run Console Application in C#

L5   Programs based on Control Statements

L6-L8	Programs based on Classes & Inheritance
L9-L10	Programs based on Arrays
L11-L12	Programs based on Enumerations & structures
L13-L14	Programs based on Interfaces & Collection
L15	Programs based on Exception Handling
L16-L17	Programs based on Strings
L18-L19	Programs based on Event Handling
L20-L21	Programs based on Indexers, Operator Overloading, Conversions, Generics
L22-L23	Programs based on ADO.NET
L24	Problems based on HTML forms (GET & POST)
L25-L26	Problem based on ASP
L27	Migrating ASP Web application to ASP.NET
L28-L29	Problem based on HTML Controls
L30-L32	Problem based on Server Controls
L33-L35	Problem based on Validation Server Control
L36-L37	Problem based on Master Page
L38-L39	Problem based on state management in ASP.NET
L40-L41	Problem based on Data Management Using ADO.NET
L42-L44	Problem based on LINQ
L45-L46	Problem based on AJAX
L47-L48	Problem based on packaging & deployment
L49-L50	Introduction to Windows Application & VB.NET
L51	Simple Problems based on Windows Form

Dramatic Art (Theatre)

First Semester

DRMA 102 History and Principles of Dramatic Art

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: On successful completion of the course students will be able to:

- Understand the History and Principles of Dramatic Art.
- Contribution of Greek Theatre in the Drama Worlds.
- Role of the Rasa in Social Community and Acting Method.
- Understand the Nature of the Folk Drama of Rajasthan.

Content -

Unit 1   Development of Dramatic art with special Reference to Greek Theatre (Stage, Actor, Writer)

Unit 2   Development of Indian Drama (Before Bhartendu)

Unit 3   Introduction of RASA Theory (Principle of RASA by Bharat muni)

Unit 4   Folk and Regional theatre of Rajasthan (Type of Khyal & Leela)

Unit 5   Theatre Glossary (Component of Theatre and Technical world)

Book Recommended :

1. Natya kala ke teen sahastra varsh - Sheldon chain (Tr. Sh Das) U.P. Sahitya Akadmi, Lucknow.

2. Natya Shastra of Bharat muni (Relevant Chapters) Chaukhamba, Varanasi.

3. Rang Darshan - Nemichand Jain.

4. Indian Theatre - Adya Rangacharya, Shabdkar, New Delhi.

5. Paramparik Bhartiya Rang Munch - Anant Dharaen By Vatsayan National Book trust, Delhi.

DRMA 102L History and Principles of Dramatic Art Lab

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Learning Outcomes: On successful completion of the course students will be able to:

- Understand the Role of Exercise and Yoga for the Actor.
- Develop the Relationship with the Drama Book.
- Understand the Technical Words of Theatre.
- Process and Maintain a basic Knowledge of the Tradition of Theatre.
- Articulate Theatrical Knowledge of the Basic Areas of Theatre.

Content –

☐ BODY AWARENES WORK SUBMISSION & VIVA- (MARKS 20)

UNIT-A

1. THEATRE GAMES
2. BODY WARM UP
3. READING DRAMA
4. YOGA EXERCISE
5. MOVEMENT OF STAGE
6. IMPROVISATION
7. CO- ORDINATION
8. SYNCRONISATION

☐ WORK SUBMISSION (FILE) & VIVA - (MARKS 20)

UNIT-B

1. CULTURE ACTIVITIES OF VIDYAPITH-(JULY TO DECEMBER)
2. YOGA (PICTURE)
3. GAMES & EXERCISE

NOTE - VIVA BASED ON FILE WORK & PRACTICAL CLASSES

Second Semester

DRMA 101 Acting and Speech

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: On successful completion of the course students will be able to:

- Develop Vocal, Physical and Imaginative Skills to Express the Emotions.
- Understand the Various Acting Theory of the World.
- Understand the Styles of Indian Folk Dramas.
- Understand the Elements of Drama Analysis.

Content -

Unit 1   Detailed study of PARSI RANGMUNCH
- History and Development
- Drama - Yahudi ki Ladki
- Actors
- Writer

Unit 2   Study of Important Acting theories
- Bharat
- Stynislavasky
- Brecht

Unit 3   Study of Indian Folk Drama
- Ram Leela
- Rasleela
- Kudiyattam
- Yatra

Unit 4   Detailed Study of Speech
- Dramatic Speech & Normal Speech
- Vocal organs & Articulator organs
- Respiratory system
- Urdu diction

Unit 5 General Principal of Play analysis

- Yahudi ki Ladaki - Aaga Hashra kashmiri
- Aashad ka ek din - Mohan Rakesh
- Andher nagari - Bhartendu Harish Chandra
- Ghasiram Kotwal – Vijay Tendulkar

Book Recommended :

1. History and Development of Parasi Theatre - Ranveer Singh.
2. Natya Shastra of Bharat muni (Relevant Chapters) Chaukhamba, Varanasi.
3. An actor Prepares - Stynislavsky, methoen-London.
4. Paramparik Bhartiya Rang Munch - Anant Dharaen by Vatsayan National Book Trust, Delhi.
5. Related Drama Book.

DRMA 101L Acting and Speech Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: On successful completion of the course students will be able to:

- Understand the rehearsal and Performance Process.
- Develop the Relationship between the Actor and the Director, the Actor and Stage Manager, Actor and Production Crew, Actor and Fellow Actors.
- Understand the Role of Improvisation, Co-ordination and Synchronization in the Drama.
- Understand the Organs of Speech and Respiration.
- Understand the difference between the Dramatic Voice and Normal Voice.

Content -

1. Improvisation
   - Exercises and games for the development of improvisation skill.
2. Co-ordination
   - Exercises and games for the development of Co-ordination Skill.

3. Projection of Voice
   - Vocal Exercise
4. Speech Work
   - Pitch, Power, Diction & Posses.
5. 5 Drama Reading (Eakankis)
   - By famous drama writers
6. Enactment of Scans
   - Process of Scan Making
7. Physical Exercise
8. File Work

Third Semester

DRMA 202 Sanskrit Drama Literature

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course students will be able to:

- Develop Working Knowledge of the Principle Works, Authors, Genres and Periods of Sanskrit Drama Literature.
- Understand texts in Their Cultural and Historical Contexts.
- Analyze Literature Using Appropriate Terminology and Common rhetorical figures.
- Demonstrate Awareness of Different Critical Approaches.
- Perform Competent Close readings of Texts.

Unit 1 Detailed study of the Sanskrit Drama
   - History and Development Sanskrit Drama
   - Principle of the Sanskrit Drama
   - Specialty of the Sanskrit Drama
   - Rupak – Up Rupak

Unit 2 Mahakavi Bhas
   - Dramas
   - Personality and Creativity

- Story Line of Drama
- Specialty of Language
- Characterization

Unit 3   Mahakavi Shudrak

- Story Line of the Mrichchhkattikam
- Character
- Specialty of the Creation
- Characterization and Language

Unit 4   Mahakavi Kalidas

- Characterization and Specialization
- The Malvika Agnimitra
- The Vikramo - Urvashi
- The Abhigyan Shakuntalam

Unit 5   Mahakavi Vishakh Dutt and Bhavbhuti

- The Mudra - Rakshak
- The Malati-Madhava
- The Uttar Ram Chritra

Recommended Books:

- Sanskrit Sahitya ka Itihaas – Dr. Priti Prabha Goyal – Granthagar, Jodhpur.
- Bhartiya Natya Parampara aur Rangbhumi – Dr. Madan Mohan Bhardwaj, (Nation Publishing House, New Delhi)
- Indian Theatre – Adya Rangacharya – Shabdkar – New Delhi.
- Rang Parampara – Nemi Chandra Jain.
- Bhartiya Rangmanch ka Udbhav & Vikas – Dr. Dashrath Ojha.

DRMA 203L Transformation to an Actor Lab

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:

- Demonstrate Technical and Artistic Proficiency in Acting.
- Develop Working Knowledge of the Voice and Speech.
- Understand Technical and Artistic Movements of Theatre.
- Strong Supple Bodies that are Capable of Playing a Variety of Characters with Various Physical Demands.
- Work on the Whole Body/Mind of an Actor.

1. **Characterization**
   - Developing Character
   - Physical Attitude
   - Physical Visualization
   - Physical Attributes
   - Developing Character Ability

2. **Acting**
   - Work on basic Performance Skills Continues.
   - Basic Text and Speech Analysis.
   - Scene Work and Rehearsals of Modern Realistic Text That Culminate In An In House Production.

3. **Play Reading**
   - The Script Should Be Read Several Times.
   - Each Reading Should Have Definite Purpose.

4. **Movement**
   - Yoga Exercise, Theatre Games.
   - Movement Created In Space With Special Emphasis On Gesture and Posture.

5. **Making a File For Class Work and Practical Work,**

6. **Internal Assessment**
   - Regular Attendance and Active Participation In Class Are Vitally Important To Both You and Your Classmate.

Fourth Semester

DRMA 201 Hindi Drama Literature

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course students will be able to:

- Demonstrate Knowledge of the History or Culture of the Hindi Drama Literature.
- Apply Critical and Theoretical Approaches to the reading and Analysis of Literary and Cultural Texts in Multiple genres.
- Understand Drama Texts in Their Culture and Historical Contexts.
- Analyze Literature Using Appropriate Terminology and Common Rhetorical Figures.

Unit 1 Bharatendu Harish Chandra

- First Drama of Hindi
- Personality of Bhartendu
- Creativity
- Speciality
- Dramas

Unit 2 Jay Shanker "Prasad"

- Personality
- Ajat Shatru
- Skand Gupt
- Dhurvaswamini

Unit 3 Hindi Drama Writer's of 20th Century

- Laxmi Narayan Mishra
- Jagannath Prasad Milind
- Upendra Nath Ashk
- Laxmi Narayan Lal

Unit 4 Mohan Rakesh

- Personality
- Creativity
- Drama – Aashad ka Ek Din

Unit 5   Shankar Shesh

- Personality
- Creativity
- Phandi
- Raktbeej

Recommended Books:

- Hindi ke Pramukh Natyakar – Dr. Malini Mishra – Mordern Printer, Jaipur.
- Hindi Rangmanch ka Udbhav aur Vikas – Dr. Vishvanath Sharma, (Raj Publishing House, Delhi).
- Bisveen Shatabadi ka Hindi Natak aur Rangmanch – Girish Rastogi – Bhartiya Gyanpeeth.
- Rang Darshan – Nemi Chandra Jain.
- Related Drama's Book.

DRMA 201L Hindi Drama Literature Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Learning Outcomes: On successful completion of the course students will be able to:

- Analyze the Functions of Text and Their Relations with Historical, Social and Political Contexts.
- Familiarity with terms, Practices and Theoretical Foundations.
- Understand Pre-production Process in File work.
- Demonstrate Knowledge of the Character.

1.   **Skit Production Under Supervision of Faculty**

- Making A Story
- Characterization
- Rehearsal
- Presentation on Practical Exam

Acting & Speech
- Work on Basic Performance Skills Continuous.
- Basic Text And Speech Analysis.

2. **Play Reading and Analysis.**
- Andhere Nagari
- Chandragupta
- Aadhe Adhure

3. **Theatrical Games and Exercise Regular.**

4. **Making A File For Practical And Class Work.**

5. **Internal** Assessment
- Regular Attendance And File Work

Fifth Semester

DRMA 301L One Act Play Lab

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:
- Understand the Craft and Technique of the One Act Play.
- Develop the Predicting Skills.
- Understand the Role of Que Sheets in the Production.
- Listening and Connecting emotionally to Multiple Scene Partners.
- Creating Characters and Performances that Serve a Broader Story and Production.

Course Content:
1. Production of One Act Play
- Production file with cue sheet
- Characterization
- Production work
- Presentation
- Set Design
- Costume Design

2. Acting & Speech
   - Work on basic Performance skills Continues
   - Basic text and speech Analysis
3. Play Reading and Analysis.
4. Theatrical Games and Exercise Regular.
5. Making A file for Practical and class work.
6. Internal Assessment
   - Regular
   - Creative
   - File work

Sixth Semester

DRMA 302L Play and Production Lab

Max. Marks : 60   **L T P C**
(CA: 20 + ESA: 40)   **0 0 8 4**

Learning Outcomes: On successful completion of the course students will be able to:

- Developing an Extensive Vocal Warm-up Process for Rehearsal and Performance.
- Participating in Crew and Stage hand Responsibilities.
- Carrying out Production Meetings and Marketing.
- Demonstrate Understand of the Social and Artistic Movements that have Shaped Theatre as we know it Today.
- Demonstrate Proficiency in one or more area. Specific Skills Acting, Directing, Choreography, Design, Technical Theatre, Management, Playwriting.

Content:

1. Production of Full Length Drama
   - Production file with cue sheet
   - Characterization
   - Production work with Teem
   - Presentation with Poster's Broshar
   - Set Design
   - Costume Design
   - Practice and Perform Play

2. Making Set Model
    - Base On Syllabus Dramas
    - Each Student make a Modal Necessary
3. Acting & Speech
    - Work on Basic Performance Skills Continues
    - Basic Text and Speech Analysis Continues
4. Play Reading and Analysis.
5. Theatrical Games and Exercise Regular.
    Internal Assessment base on Regularity and Creativity.

Discipline Electives

DRMA 304L Analysis of One Act Play

Max. Marks : 60	L	T	P	C
(CA: 20 + ESA: 40)	0	0	8	4

Learning Outcomes: On successful completion of the course students will be able to:

Demonstrate Knowledge of the History of One Act Play.

-   Develop Working Knowledge of the Principles of One Act Play.
-   Analyze One Act Play Using Appropriate Terminology and Common Theatrical Figures.
-   evelop the Specialization Skills of One Act Play.

Content:

-   Andhi Aankhon Ka Aakash – Mani Madhukar
-   Hawalat - Sarveshwar Dayal Saxena
-   Pratishodh – Ram Kumar Verma
-   Seema Rekha – Vishnu Prabhakar
-   Khandhar – Jagdeesh Chandra Mathur
-   Mahabharat Ki Sanjh – Bharat Bhoshan Agrawal

DRMA 303L Analysis of Modern Hindi Drama

Max. Marks : 60   **L   T   P   C**

(CA: 20 + ESA: 40)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:

- Demonstrate knowledge of the history of the modern Hindi Drama Literature.
- Analyse full length dramas using appropriate terminology and common theatrical figures.
- Understand the role of drama for community culture and society.
- Familiar with the modern hindi drama writers and his texts.

Content:

- AADHE ADHOORE.
- EK THA GADHA URF ALADAD KHAN.
- JIN LAHOR NI YEKHYA O JAMYA HI NI.
- HAY MERA DIL.
- ANDHA YUG.

DRMA 306L Rajasthani Folk Drama Jaipuri Tamasha

Max. Marks : 60   **L   T   P   C**

(CA: 20 + ESA: 40)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:

Demonstrate knowledge of the History and Culture of the Rajasthani Folk Dramas.

- Develop the Predicting Skills.
- Understand the Role of Folk Drama for Community Culture and Society.

Content –

- Basic Style of Folk Drama.
- Basic Movement of Particular Style.
- Techniques of Body Movements.
- Performance on Rajasthani Folk Drama.

DRMA 305L Radio and T.V. Anchoring

Max. Marks : 60   **L   T   P   C**

(CA: 20 + ESA: 40)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:

- Develop Vocal, Physical and Imaginative Skills to Express the Emotions.
- Introduce to Student Style of the Speech, Diction and Modulation.

Content –

- Basic Quality of an Anchor.
- Importance of Language.
- Modulation of Punches.
- Talking with Audience.

DRMA 308L Technical Knowledge of Costume Design

Max. Marks : 60   **L   T   P   C**

(CA: 20 + ESA: 40)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:

- To develop costume design ability through study of elements and principal of design and research techniques.
- To gain and understanding of costume design as an Allied art and essential part of the collaborative theatre production processes.

Content –

- Basic knowledge of costume design for a play.
- How to draw a costume.
- Costume chart for a play.
- Basic knowledge of costume properties.
- Costume design according the various characters.

DRMA 309L Technical Knowledge of Make-Up

Max. Marks : 60   **L   T   P   C**

(CA: 20 + ESA: 40)   **0   0   8   4**

Learning Outcomes: On successful completion of the course students will be able to:

- Develop working knowledge of principal to make-up
- Demonstrate technical and artistic proficiency in make-up.
- Understand basic techniques of make-up.

Content –

- Introduction to make-up of theatre.
- Introduction to make-up materials.
- Characters based stylized make-up techniques.
- Tonality of the color and optical illusion.
- Special effects by the make-up.

DRMA 307L Set Design

Max. Marks : 60   **L   T   P   C**

(CA: 20 + ESA: 40)   **0   0   8   4**

Learning Outcomes: On successful completion of the course, student will be able to:

- Student will eye cute basic tasks in set construction.
- Student will apply their historical and aesthetic knowledge in set design.
- Student will assess their own performance and the show as a whole.

Content –

- Basic knowledge of set designing.
- Role of ground plan in set design.
- Basic knowledge of sketch for proper set.
- Making a model of set.

Drawing and Painting

First Semester

DNP 105 Fundamentals of Visual Art-I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes

After the accomplishment of the course students will be able to:

- Know about creative process.
- Understand fundamentals and basic elements of visual arts.
- Co-relate art, nature and society.
- Communicate through art works.

Unit 1 Definition, Meaning and Importance of Arts and its usage.

Unit 2 Creative Process-Perception, Observation, Imagination, and Creative expression.

Unit 3 Subject Matter (In reference to Indian Art- Prehistoric painting, Ajanta Painting, Rajasthani Painting & Mughal Painting)

Unit 4 Art and Nature, Art and Society.

Unit 5 Folk Art. (Rajasthan).

Recommended Books

1. Coomarswamy, A. K. (1985). *"Fundamental of Indian Art"*, Jaipur.
2. Feldman, & Burke, E. (1992). "*Varieties of Visual experiences*", Prentice Hall, Englewood Cliffs.
3. Gatto, Joseph, Porter & Selleck. (1978). "*Exploring Visual Design*", Worcester: Davis Publication.
4. Herbert, R. (1972). "*Meaning of art*", London: Faber and Faber.
5. Kurtz, B. (1987). "Visual Imagination", Prentice Hall, Englewood Cliffs.
6. Rawson, P. (1987). "*Creative Design*", London: Macdonald &Co.
7. Richardson, J. A. (1973). "*Art the way it is*", Prentice Hall, Englewood Cliffs.

DNP 107L Basic Drawing – I

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	6	3

Learning Outcomes: On successful completion of the course students will be able to:

- Gain control over the uses of various mediums.
- Apply knowledge in the use of objects, subjects and mediums.
- Understand elements of art and it simplementation in their art practices.

Study of forms in nature, single objects and group of objects in line, tone and texture.

Medium : Pencil or Crayon (Monochrome).

Size: Half Imperial

Each student is supposed to submit (for Final Exam) :

4 Drawings

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers one time in a Semester.

Practical Exam:- Final assessment for DNP 107L (Display of art work with report and viva-voce)

DNP 103L Basic Sketching and Art Work

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	2	1

Learning Outcomes: On successful completion of the course students will be able to:

- Use all aspects and values of visual arts.
- Appreciate own work of art and others.
- Identify new possibilities in their art works.

Sketches (Indoor and Outdoor), studies from nature and exploration of possibilities and limitations of various media.

Each student is supposed to submit (for Final Exam) :

(a)   4 Studies from nature.

(b)   2 Art work in any medium .

Medium : (Pencil, Pen & ink, Crayon, Tempera, Water Colour and Acrylic colour.)

Size : Half imperial

(c)   50 Sketches on ¼ Imperial size.

(d)   Practical competency (Internal). - 10 Marks

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 103L (Display of art work)

Second Semester

DNP 106 Fundamentals of Visual Art-II

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course students will be able to:

- Recognize aesthetic notions and its application.
- Understand principles of visual art used in the creation, presentation and preservation.
- Explain the importance of visual art and its relevance with society and nature.

Duration: 3 Hrs.

Unit 1   Elements of Painting I – Line, Form, Colour.

Unit 2   Elements of Painting II – Tone, Texture, Space.

Unit 3   Principles of Composition I – Proportion, Unity, Harmony.

Unit 4   Principles of Composition II- Balance, Rhythm, Emphasis.

Unit 5   Six Limbs of Indian Painting.

Recommended Books

1. Coomarswamy, A. K. (1985). *"Fundamental of Indian Art"*, Jaipur.

2. Feldman, & Burke, E. (1992). "*Varieties of Visual experiences*", Prentice Hall, Englewood Cliffs.

3. Gatto, Joseph, Porter & Selleck. (1978). "*Exploring Visual Design*", Worcester: Davis Publication.

4. Herbert, R. (1972). "*Meaning of art*", London: Faber and Faber.

5. Kurtz, B. (1987). "Visual Imagination", Prentice Hall, Englewood Cliffs.

6. Rawson, P. (1987). "*Creative Design*", London: Macdonald &Co.

7. Richardson, J. A. (1973). "*Art the way it is*", Prentice Hall, Englewood Cliffs.

DNP 108L Basic Drawing - II

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 6 3**

Learning Outcomes: On successful completion of the course students will be able to:

*   Recognize and draw variety of forms and shapes, their values, texture and chiaroscuro.
*   Realize values of different objects and arrange them in making composition.
*   Emphasize concepts and the application of various materials and aesthetic values.

Study of basic geometrical shapes its construction and perspective involved in it. Study from nature and man made objects.

Medium :   Pencil or Crayon.

Size   :   Half imperial

               Each student is supposed to submit (for Final Exam) :

               4 Drawings

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 102L (Display of art work with report and viva-voce)

DNP 104L Creative Work and Study

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**2**	**1**

Learning Outcomes: On successful completion of the course students will be able to:

- Develop observation skills.
- Grow curiosity, interest and enjoyment in own creativity and others.
- Improve ideas about the visual language, concepts and principles of visual arts.

Sketches (Indoor and outdoor), studies from nature and exploration of possibilities and limitations of various media.

Each student is supposed to submit :

(a)   4 Studies from nature.

(b)   2 Art work in any medium.

Medium : (Pencil, Pen & ink, Crayon, Tempera, water colour and Acrylic colour.).

Size : Half imperial

(c)   50 Sketches on ¼ Imperial size.

(d)   Practical competency (Internal). - 10 Marks

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 104L (Display of Art Work)

Third Semester

DNP 201 History of Indian Painting and Sculpture - I

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Know the art history and its existence.
- Understand the theory and its relation with art practices.
- Write, speak and communicate ideas critically.

Unit 1   Prehistoric painting , Ajanta Painting

Unit 2   Jain Painting , Mughal Painting

Unit 3   Rajasthani Painting (Udaipur, Nathdwara, Jodhpur, Bundi, Jaipur, Kishangarh)

Unit 4   Mohenjodaro and Harappa , Maurya

Unit 5   Bharhut , Sanchi, Amaravati

Books Recommended :-

- Appasamy, J. (1968). "*Abanindranath Tagore and the Art of hisTimes*", New Delhi: Lalit Kala Akademi,.
- Archer, M. (1992). "*Company Paintings*", Ahmedabad: Mapin Publishing.
- Archer, M. (1992). "*Company Paintings*", Ahmedabad: Mapin Publishing.
- Archer, W.G. (1960). "Indian Miniatures", Greenwich: Graphic Society.
- Brown, P. (1953). "*Indian Painting*", Calcutta: Y.M.C.A publication House.
- Coomarswamy, A. (1976). *"Rajput Painting*", Delhi: Motilal Banarasidas.
- Das, R.K., (1973). "*Bhartiya Chitrkala*", Nagripracharni Sabha, Varanasi,.
- Goswamy, B.N. & Eberhard, F. (1992). "*Pahari Masters Court Painters of Northern India",* New York: Oxford University.

- रानी, डॉ. सरोज, (2012). ''पहाडी चित्रकला का अनुशीलन'', वाराणसी, कला प्रकाशन, प्रथम संस्करण, .
- Khandalavala, K. (1959). "*Kishangarh Painting*", New Delhi: Lalit Kala Akademi.
- Khandalavala, K. (1958). "*Pahari Miniature Painting*", Bombay: New Book.
- Okada, A. (1992). "*Indian Miniatures of a Mughal Court*", New York: Harry N Abrams.
- Randhawa, M.S. (1962). "Kangra Paintings on Love", New Delhi: National Museum.
- Saraswati, S.C. (1975). "*Survey of Indian Sculpture*", New Delhi: Munshiram Manoharlal.
- Sivaramamurti, C. (1977). "*The Art of India*", New York: Harry N Abrams.
- Zimmer, H. (1984). "*The Art of India Asia",* Delhi: Motilal Banarsidas.

DNP 205L Study from Life - I

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **0   0   6   3**

Learning Outcomes: On successful completion of the course, students will be able to:

- Explore and develop personal concepts regarding study from life.
- Cultivate several modes of artistic expression in study from life.
- Handle all the mediums according to requirements.

Study from Life (full human figure) depicting the structure, Proportion and form of the model.

Medium : Any medium (monochrome).

Size: Half imperial

Each Student is supposed to submit : 4 Studies from life (full human figure) {for Final Exam}

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 205L (Display of Art Work with report and Viva-Voce)

DNP 203L Sketching and Media Exploration – I

Max. Marks : 100 **L T P C**
(CA: 40 + ESA: 60) **0 0 2 1**

Learning Outcomes: On successful completion of the course, students will be able to:

- Execute freehand drawing rapidly.
- Use proper medium for visual communications.
- Draw sketches (Indoor and outdoor) as well as explore possibilities and limitations of various media.

Each student is supposed to submit (for Final Exam):

(a)   4 Art work in any medium.

Medium: (Pen & ink, Crayon, Tempera, Water colour and Acrylic colour.)

Size: Half imperial

(b)   50 Sketches in ¼ Imperial size.

(c)   Practical competency (Internal). - 10 Marks

General Instructions:

C.A. (40 Marks): Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 203L (Display of Art Work)

Fourth Semester

DNP 202 History of Indian Painting and Sculpture –II

Max. Marks : 100 **L T P C**

(CA: 40 + ESA: 60) **4 0 0 4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Know about Indian painting and sculpture.
- Identify various Indian artist and their contribution in Indian art scenario.
- Ability to link theory with creative practices.

Unit 1   Pahari painting

(Basohli, Chamba, Guler, Kangra, Garhwal)

Unit 2   Company School of Painting ,Raja Ravi Verma

Unit 3   Indian Renaissance: Abanindranath Tagore and his disciples (Nandalal Bose , Asit Kumar Haldar, Kshitindranath Majumdar, K. venkatappa)

Unit 4   Gandhar , Mathura, Gupta

Unit 5   Ellora, Elephanta, Mahabalipuram.

Recommended Books :-

- Appasamy, J. (1968). "*Abanindranath Tagore and the Art of hisTimes*", New Delhi: Lalit Kala Akademi,.
- Archer, M. (1992). "*Company Paintings*", Ahmedabad: Mapin Publishing.
- Archer, M. (1992). "*Company Paintings*", Ahmedabad: Mapin Publishing.
- Archer, W.G. (1960). "Indian Miniatures", Greenwich: Graphic Society.
- Brown, P. (1953). "*Indian Painting*", Calcutta: Y.M.C.A publication House.
- Coomarswamy, A. (1976)."*Rajput Painting*", Delhi: Motilal Banarasidas.
- Das, R.K., "*Bhartiya Chitrkala*", Nagripracharni Sabha, Varanasi, 2030.
- Goswamy, B.N. & Eberhard, F. (1992). "*Pahari Masters Court Painters of Northern India"*, New York: Oxford University.
- रानी, डॉ. सरोज, (2012). ''पहाडी चित्रकला का अनुशीलन'', वाराणसी, कला प्रकाशन, प्रथम संस्करण, .
- Khandalavala, K. (1959). "*Kishangarh Painting*", New Delhi: Lalit Kala Akademi.
- Khandalavala, K. (1958). "*Pahari Miniature Painting*", Bombay: New Book.
- Okada, A. (1992). "*Indian Miniatures of a Mughal Court*", New York: Harry N Abrams.
- Randhawa, M.S. (1962). "Kangra Paintings on Love", New Delhi: National Museum.

- Saraswati, S.C. (1975). "*Survey of Indian Sculpture*", New Delhi: Munshiram Manoharlal.
- Sivaramamurti, C. (1977). "*The Art of India*", New York: Harry N Abrams.
- Zimmer, H. (1984). "*The Art of India Asia*", Delhi: Motilal Banarsidas.

DNP 206L Study from Life – II

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**6**	**3**

Learning Outcomes: On successful completion of the course, students will be able to:

- Make free hand structural drawings of human figure.
- Enrich knowledge about various poses of human figure
- Know about the importance of light & shades.
- Get acquainted with the handlings of various mediums used in life study.

Study from Life (full human figure) depicting the structure, Proportion and form of the model.

Medium : Any medium (monochrome).

Size : Half Imperial

Each Student is supposed to submit : 4 Studies from Life (full human figure) {**for Final Exam**}

General Instructions :

C.A. (40 Marks): Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 206L (Display of Art Work with report and Viva-Voce)

DNP 204L Sketching and Media Exploration – II

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**2**	**1**

Learning Outcomes: On successful completion of the course, students will be able to:

- Enhance the use of appropriate medium and relate with the concept of art.

- Explore ideas about the language, concepts and principles of visual arts.
- Experiment in their art works and bring about innovations.

Sketches (Indoor and outdoor) and exploration of possibilities and limitations of various media.

Each student is supposed to submit (for Final Exam):

(a)   4 Art work in any medium .

Medium: (Pen & ink, Crayon, Tempera, Water colour and Acrylic colour.)

Size: Half imperial.

(b)   50 Sketches in ¼ Imperial size.

(c)   Practical competency (Internal). - 10 Marks

General Instructions:

C.A. (40 Marks): Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 204L (Display of Art Work)

Fifth Semester
DNP 305L Sketching and Media Exploration - III

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: On successful completion of the course, students will be able to:

- Execute freehand drawing rapidly and recognize the importance of sketching in visual art studies.
- Achieve all learning experiences and create art works accordingly.
- Synthesis previous knowledge with new insights, regarding sketching and media exploration.

Sketches (Indoor and outdoor) and exploration of possibilities and limitations of various media.

Each student is supposed to submit (for Final Exam):

(a)   4 Art Workin any medium.

Medium: (pen&ink, crayon, tempera, water, oil, acrylic color and Mixed Media.)

Size : Half imperial

(b)   50 Sketches on ¼ Imperial size.

(c)   practical competency (Internal). - 10 Marks

Submission work will be submitted to the Head of the Department of Drawing & Painting one week before the commencement of Examination.

Submission work may be returned after the evaluation.

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 305L (Display of Art Work)

Discipline Electives

DNP 303L Portrait Painting - I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**6**	**3**

Learning Outcomes: On successful completion of the course, students will be able to:

- Analyze own problem in portrait painting and solve accordingly.
- Learn proper techniques to create a portrait painting.
- Create aesthetic appeal in a portrait.

The study must bear the qualities of structure, proportion and the characteristics of the face.

Medium- Pencil, Crayon or Oil Colour.

Size-Half Imperial

Each Student is supposed to submit (for Final Exam.) : 4 Studies of Portrait

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 303L (Display of Art Work with report and Viva-Voce)

DNP 301L Pictorial Composition - I

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		0	0	6	3

Learning Outcomes: On successful completion of the course, students will be able to:

- Know subjects and materials used in composition.
- Identify the importance of realistic and abstract subject in composition.
- Realize the aesthetic value of composition.

Subjects based on day to day experience in life.

Medium - Water colour, Tempera, Acrylic and Mix media

Size-Half Imperial

Each Student is supposed to submit (for Final Exam) : 4 Compositions

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 301L (Display of Art Work with report and Viva-Voce)

DNP 307L Screen Printing - I

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		0	0	6	3

Learning Outcomes: On successful completion of the course, students will be able to:

- Command of the technical aspects of all processes covered.
- Conversant with multiple introductory screen printing processes
- Think critically, communicate clearly and work creatively in intellectual pursuit.
- Explore and develop personal concepts in creative expression.

Course of Screen printing basically aims at providing all the theoretical and practical knowledge about printing technology to students based on study, design and manufacturing aspects of screen printing. It will also include fundamentals of printing process, different techniques of printing etc.

Each student is supposed to submit (for Final Exam.) : 4 Prints

General Instructions:

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam : - Final assessment for DNP 307L (Display of Art Work with report and Viva-Voce)

Sixth Semester

DNP 306L Sketching and Media Exploration – IV

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: On successful completion of the course, students will be able to:

- Execute freehand drawing rapidly.
- Know about the new media art.
- Execute ideas through unconventional mediums.

Sketches (Indoor and outdoor) and Exploration of possibilities and limitations of various media.

Each student is supposed to submit (for Final Exam) :

(a)   4 Art Work in any medium

Medium: (Pen &ink , Crayon , Tempera, water, oil, Acrylic color and Mixed Media.)

Size : Half imperial

(b)   50 Sketches on ¼ Imperial size

(c)   practical competency (Internal)   - 10 Marks

Submission work will be submitted to the Head of the Department of Drawing & Painting one week before the commencement of Examination. Submission work may by returned after the evaluation.

General Instructions :

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 306L (Display of Art Work)

Discipline Electives

DNP 304L Portrait Painting - II

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	6	3

Learning Outcomes: On successful completion of the course, students will be able to:

- Know about the role of portraiture in art practices (from ancient to contemporary).
- Understand the anatomy of face, structure, light, shade, proportion and the characteristics of model.
- Develop eclectic and aesthetic knowledge about portrait making

The study must bear the qualities of structure, proportion and the characteristics of the face.

Medium – Oil Colour

Size-Half Imperial

Each Student is supposed to submit (for Final Exam): 4 Studies of Portrait

General Instructions:

C.A. (40 Marks) : Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 304L (Display of Art Work with report and Viva-Voce)

DNP 302L Pictorial Composition - II

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	6	3

Learning Outcomes: On successful completion of the course, students will be able to:

- Enrich knowledge about composition based on sketching and drawing.
- Realize the meaning of realistic and abstract value of composition
- Emphasize the significance of colour in composition.

Subjects based on day to day experience in life.

Medium - Water colour, Tempera, Acrylic and Mix media

Size-Half Imperial

Each Student is supposed to submit (for Final Exam): 4 Compositions

General Instructions:

C.A. (40 Marks): Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam:- Final assessment for DNP 302L (Display of Art Work with report and Viva-Voce)

DNP 308L Screen Printing - II

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**6**	**3**

Learning Outcomes: On successful completion of the course, students will be able to:

- Command of the technical aspects of all processes covered.
- Conversant with multiple introductory screen printing processes.
- Think critically, communicate clearly and work creatively in intellectual pursuit.
- Explore and develop personal concepts in creative expression.

Course of Screen printing basically aims at providing all the theoretical and practical knowledge about printing technology to students based on study, design and manufacturing aspects of screen printing. It will also include fundamentals of printing process, different techniques of printing etc.

Each student is supposed to submit : 4 Prints

General Instructions:

C.A. (40 Marks): Continuous Assessment will be conducted by a Board of Examiners minimum three Teachers once in a Semester.

Practical Exam : - Final assessment for DNP 308L (Display of Art Work with report and Viva-Voce)

Economics

First Semester

ECO 106 Micro Economics -I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Describe nature and scope of Economics.
- Analyze cardinal and ordinal approaches to consumer behaviour.
- Illustrate uses of indifference curvess.
- Discuss various concepts of elasticity and its measurement.
- Analyze short run and long run law of Production.
- Discuss various concepts related to cost and explain the behaviour of cost in short run and long run.

Unit 1 Nature and scope of Economics. Consumer Equilibrium: Utility Approach – Assumptions and laws, Indifference curve Approach – Concepts and properties of Indifference curves, Budget Line, Changes in consumer equilibrium - Price, Income and Substitution effects.

Unit 2 Derivation of demand curve from price consumption curve for Normal and Giffen goods. Substitute and complementary goods. Comparison between utility and indifference curve approach. Applications and uses of indifference curves.

Unit 3 Elasticity of Demand - concept and measurement of Price elasticity of demand, determinants of price elasticity of demand. Income and cross elasticity of demand. Consumer surplus - concept and measurement.

Unit 4 Production function: Law of variable proportions, Returns to scale- concept of Isoquants and Iso-cost line, Least-Cost combination, concept of ridge lines.

Unit 5 Concept of cost: Money, opportunity and real. Short- Run Cost curves: Total cost, Total Fixed and Variable costs, Average cost and Marginal cost. Long Run Total, Average and Marginal cost curves.

Recommended Books:

1. Gauld, J. P. and Edward P. L. (1996). *Micro Economic Theory*. Richard Irwin, Homeword.

2. Lipsey, R. G. and K. A. Chrystal (1999). *Principles of Economics* (9th Edition). Oxford: Oxford University Press.

3. Mankiw, G. (2009). *Microeconomics*. United States: South Western Cenage Learning.

4. Mansfield, E. (1997). *Microeconomics* (9th Edition). New York: W.W. Norton and Company.

5. Salvatore, D. (2009). *Principles of Microeconomics*. United Kingdom: Oxford University Press.

6. Samuelson, P.A. and W.D. Nordhaus (1998). *Economics*. New Delhi: Tata McGraw Hill.

7. Varian, H.R. (2000*). Intermediate Microeconomics: A modern Approach (5th Edition*). New Delhi: East West Press.

E- Learning Material

1. www.aeaweb.org
2. https://www.oswego.edu/economics/resources

ECO 109   Money and Banking

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Understand the role of money in thebroader economy.

- Understand the unique role of banking financial system.

- Analyse a Bank's balance sheet.

- Acquire adequate knowledge of theories related to supply of, and demand of money, and its relationshipwith prices.

- Analyse the role of a central bank andinstruments of monetary policy.

Unit 1 Definition and functions of money, Gresham's law, Role of money in capitalist, socialist and mixed economies.

Unit 2   Supply of money: Concepts and Components, Approaches regarding measures of money supply – Traditional approach, Chicago School's Monetarist approach, Gurley Shaw approach and Radcliffe or Liquidity approach. A brief discussion of RBI's measures of money supply. Demand for money: Pre-Keynesian and Keynesian approach.

Unit 3   Money and Prices : (i) Traditional Quantity theory of money (Fisher's equation and Cambridge equations) (ii) Income theory of money and prices (iii) General theory of money and prices.

Unit 4   Banking - Meaning and Functions of commercial banks, Process of credit creation, Balance-Sheet of a commercial bank: Format and Portfolio Management.

Unit 5   Central Banking: Definitions, Functions, Methods of credit control – Quantitative and Qualitative measures.

Reserve Bank of India – Organisation and Functions.

Recommended Books:

1. Mitra S. (1970). *Money and Banking*, Random House, New York.

2. Gupta, S. B. (1983). Monetary Economics. Oxford: Oxford University Press.

3. Sethi, T.T. (1996). *Monetary Economics*. New Delhi: Sultan Chand & Sons.

4. Luckett, D.G. (1976). *Money and Banking*, McGraw-Hill Kogakusha, Ltd.

E-Learning Materials:

1. https://rbi.org.in/Scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy

2. https://www.rbi.org.in/scripts/fs_overview.aspx?fn=2752

3. https://rbi.org.in/CommonPerson/english/scripts/banksinindia.aspx

Second Semester

ECO 107   Micro Economics - II

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Describe various revenue concepts and explain the behaviour of revenue under different market structures
- Identify structure of a market
- Analyze short run and long run equilibrium of firms under perfect and imperfect competition.
- Discuss various concepts related to profit and to analyse the determination of profit
- Discuss various concepts related to rent and to analyse the determination of rent.
- Discuss various concepts related to interest and to analyse the determination of interest.

Unit 1 Revenue concepts – Shape of Total Revenue, Average Revenue and Marginal Revenue curves under perfect and imperfect competition. Relationship between Average Revenue, Marginal Revenue and Price elasticity of demand.

Market structures – Short run and long run equilibrium of a firm and industry under perfect competition. Effect of increase in demand on long run equilibrium price and output under perfect competition.

Unit 2 Determination of price and output in short run and long run under Monopoly.Third degree price discrimination under monopoly.

Determination of price and output in short run and long run under Monopolistic competition.Introduction to Oligopoly.

Unit 3 The nature of demand for factors of production. General theories of distribution: The Marginal Productivity theory and demand supply theory (Modern Theory). Wages: Real and money wages – Demand and supply theory of wages, Role of trade unions in the determination of wages.

Unit 4 Profit: Normal and surplus, Gross and Net Profit - Risk, uncertainty bearing, Innovation and marginal productivity theories. Rent: Ricardian and Modern Theories – Rent and Price – Quasi Rent – situation and ability rent.

Unit 5 Interest: Gross and net interest, real and money interest – bond prices and rate of interest, saving and investment, liquidity preference and modern theories of interest.

Recommended Books:

1. Gauld, J. P. and Edward P. L. (1996). *Micro Economic Theory*. Homeword: Richard Irwin.

2. Lipsey, R. G., and K. A. Chrystal (1999). *Principles of Economics* (9th Edition). Oxford: Oxford University Press.

3. Mankiw, G. (2009). *Microeconomics*. United States: South Western Cenage Learning.

4. Mansfield, E (1997). *Microeconomics* (9th Edition). New York: W.W. Norton and Company.

5. Salvatore, D. (2009). *Principles of Microeconomics*. United Kingdom: Oxford University Press.

6. Samuelson, P.A. and W.D. Nordhaus (1998). *Economics*. New Delhi: Tata McGraw Hill.

7. Varian, H. R. (2000). *Intermediate Microeconomics: A Modern Approach (5th Edition*). New Delhi: East West Press.

E-Learning Material:

1. www.aeaweb.org

2. https://www.oswego.edu/economics/resources

STAT 103   Elementary Statistical Methods

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Describe the meaning, function and limitations of Statistics.
- Represent the data through diagrams and graphs.
- Calculate the measures of central tendency.
- Calculate the measures of dispersion.
- Calculate the measures of skewness and kurtosis.

- Interpret the results of measures of central tendency, dispersion, skewness and kurtosis.

Unit 1 Statistical Methods: Introduction: Meaning, Functions and Limitations of Statistics. Data collection: Census and Sample Methods of data collection. Preparation of frequency table by using exclusive and inclusive method of classification for discrete/continuous variable.

Unit 2 Tabulation of data. Data Presentation: Diagrammatical presentation of data by one and Two Dimensional Diagrams, Graphical representation of data by Histogram and Ogives.

Unit 3 Analysis of Univariate Data: Measures of Central Tendency – Mean Median and Mode, Numerical exercises based on Airthmetic Mean, Median, Mode, Combined Mean.

Unit 4 Measures of Dispersion: Range, Mean Deviation, Standard Deviation and Lorenz Curve. Numerical exercises based on Range, Mean Deviation, Standard Deviation, Coefficient of variation, Combined Standard Deviation.

Unit 5 Skewness and Kurtosis. Calculation of first four moments about arbitrary origin and about mean. Measures of skewness and kurtosis based on moments: calculation of other measures of skewness and kurtosis and their interpretation.

Recommended Books:

1. Gupta, S.C. (2018). *Fundamentals of Applied Statistics*. New Delhi: S. Chand & Sons.

2. Gupta, S.P. (2002). *Introduction to Statistical Methods*. New Delhi: S. Chand & Sons.

3. Speigal, M.R., (1999). *Theory and Problems of Statistics*. London: Mcgraw Hill Book Co.

E-Learning Material:

1. http://www.statsoft.com/Textbook

2. https://www.khanacademy.org/math/ap-statistics/summarizing-quantitative-data-ap/measuring-center-quantitative/v/statistics-intro-mean-median-and-mode

Third Semester

ECO 202   Macro Economics -I

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Describe nature, scope and limitation of Macro Economics.
- Describe Circular flow of income and expenditure.
- Calculate National Income and its related aggregates and analyse the problems and limitation of National income estimation
- Describe concepts of employment, unemployment and full employment.
- Analyse the Classical Theory of Income and Employment.
- Describe Keynesian theory of employment and principle of Effective Demand.

Unit 1   Macro Economics: Meaning, Nature, Scope, Limitation, Interdependence between Micro Economics and Macro Economics, Stock and Flow Variables, Circular flow of income and expenditure in two, three and four sector model: Major leakages and injections.

Unit 2   National Income and its related aggregates – GDP, GNP, NDP NNP, Private income, Personal income and Personal disposable income; Components of National Income, Inter-relationship among National Income aggregates. Nominal GDP and Real GDP Uses and limitation of national income statistics.

Unit 3   Methods of Measuring National Income- Product or value added method, Income method and Final Expenditure method. Precautions and limitations of various methods, Problems in the estimation of national income. National Income and Economic Welfare.

Unit 4   Employment and Unemployment: Concept of full employment, Types of Unemployment. Say's Law of Market, Classical Theory of Income and Employment: without saving and investment and with saving and investment model, Effect of change in money market and labor market.

Unit 5   Keynesian objection to the classical theory. Keynesian Theory of Employment – Aggregate demand and aggregate supply function, The Principle of Effective demand.

Recommended Books:

1. Ahuja,H.L.(2012). *Macroeconomics-Theory and Policy*. New Delhi: S.Chand & Company Ltd.

2. Dornbush, R. and Fischer, S. (2001), *Macroeconomics*. New York: Mcgraw Hill Book Company.

3. Mankiw, N. G. (2010). *Macroeconomics*. New York: Worth Publishers.

4. Shapiro, E. (1996). *Macroeconomic Analysis*. New Delhi: Galgotia Publication.

E-Learning Material:

1. http://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/economics/basic_macroeconomics/02._circular_flow_of_income_and_expenditure/et/5380_et_02et.pdf

2. http://sites.northwestern.edu/neweresources/2009/03/11/american-economic-journal-macroeconomics/

3. https://www.rbi.org.in/SCRIPTs/PublicationsView.aspx?id=18466 https://www.rbi.org.in/SCRIPTs/PublicationsView.aspx?id=18467

4. https://www.marxists.org/reference/subject/economics/keynes/general-theory/ch02.htm

5. http://www2.econ.iastate.edu/tesfatsi/sources.html

STAT 206   Quantitative Techniques

	L	**T**	**P**	**C**
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Solve numerical problems related to Correlation and Regression analysis and identify its applications

- Explain meaning of Index numbers and demonstrate ability to construct Index numbers using various techniques.

- Solve various types of numerical based on Probability and related theorems.
- Measure trend using various techniques of Time Series Analysis.
- Define various concepts and solve numerical related to Quadratic equations, Matrices and Straight Line.
- Explain basic techniques of differentiation and integration and its applications in economics.

Unit 1 Analysis of Bivariate Data: Simple Correlation – Karl-Pearson's Coefficient of Correlation, Spearman's rank correlation. Simple regression – Estimation of regression lines by method of least squares. Numerical exercises based on correlation and regression.

Unit 2 Index Numbers – concept and uses. Problems in construction of index numbers.Construction of simple and weighted index numbers by aggregative and average of price relative methods. Base shifting, splicing and deflating of index numbers. Cost of living index numbers.

Unit 3 Meaning, Objectives and components of Time Series. Measurement of linear trend by Graphic Method, Method of Semi-Averages, Method of Moving Averages and Method of Least Squares. Measurement of seasonal variation by the Method of seasonal average.

Unit 4 Concepts of events and probability, addition and multiplication theorems. Conditional probability and independence of events. Numerical problems based on probability.

Unit 5 Solution of quadratic equations. Straight line. Simple applications of straight line. Addition, subtraction and multiplication of matrices. Introduction to Differentiation and Integration of Algebraic Functions and some applications in Economics.

Recommended Books:

1. Black, J. and Bradley, J. F. (1973). *Essential Mathematics for Economists*. New Jersy, US: John Willey and Sons.

2. Bose, D. (2018). *An Introduction to Mathematical Economics.* New Delhi: Himalaya Publishing House.

3. Gupta, S.C. (2018). *Fundamentals of Applied Statistics*, New Delhi: S. Chand & Sons.

4. Gupta, S.P. (2002). *Introduction to Statistical Methods*. New Delhi: S. Chand & Sons.

5. Speigal, M.R. (1999). *Theory and Problems of Statistics*. London: Mcgraw Hill Book Co.

E-Learning Material:
1. http://www.jamesbrennan.org/algebra/
2. http://www.statsoft.com/Textbook
3. https://www.britannica.com/science/statistics

Fourth Semester

ECO 203   Macro Economics - II

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- Understand the basic concepts of consumption, savings, investment, inflation, deflation and Unemployment-Inflation trade-off.

- Understand the tenets of Keynesian Economics and apply them through the aggregate demand and supply model.

- Explain how the equilibrium interest rate is determined in the money market.

- Define the investment multiplier; explain its calculation, and relevance.

- Explain the working of acceleration principle and its weaknesses.

- Describe the business cycles and their phases

Unit 1   Consumption Function: Meaning, Types of consumption Function – Linear and Non-Linear consumption Functions. Keynesian Psychological Law of Consumption, Factors Influencing Consumption Function.

Saving Function – Derivation of saving function from consumption function, APS and MPS.

Investment Function – Types of Investment: Induced Investment and Autonomous Investment, Gross and Net Investment, Financial and Real Investment. Factors affecting Investment Decision.Concepts of MEC (Marginal Efficiency of Capital) and NPV (Net Present Value).

Unit 2 Determination of Equilibrium of National Income: Keynesian Theory – Aggregate Demand and Aggregate Supply Approach and Saving and Investment Approach. Relevance of Keynesian theory in underdeveloped countries. Equilibrium in Money Market.

Unit 3 Investment Multiplier: Concept and Working of static Multiplier. Assumptions and Leakages of Multiplier. It's Effectiveness in less developed countries (LDC's).

Acceleration Principle: Concept, Operation and Weaknesses.

Unit 4 Inflation: Meaning and Types, Cost Push and Demand Pull inflation, Inflationary Gap. The Phillips Curve: Relation between inflation and unemployment, Short-run and long-run Phillips curve. Measures to control inflation.

Unit 5 Deflation: Meaning and causes, Deflationary Gap, Measures to control deflation.

Business cycles: Types and Phases, Theories of Business cycle – Hicks and Samuelson.

Recommended Books:

1. Ackley, G. (1978). *Macroeconomics: Theory and Policy*. New York: Macmillan.

2. Blackhouse, R. and A. Salansi (Eds.) (2000). *Macroeconomics and the Real World* (2 Vols.). London: Oxford University Press.

3. Branson, W.A. (1989). *Macroeconomic Theory and Policy*, (3rd Edition), New York: Harper and Row.

4. Dornbush, R. and Fischer, S. (1999), *Macroeconomics,* (7th ed.). New York: Mcgraw Hill Book Company.

5. Mankiw, N. G. (2010). *Macroeconomics*. New York: Worth Publishers.

6. Shapiro, E. (1996). *Macroeconomic Analysis*. New Delhi: Galgotia Publication.

7. Stiglitz J. E. and Walsh, C. E. (2002). *Principles of Macroeconomics*, New York: W.W. Norton & Company.

E-Learning Material:
1. https://www.aeaweb.org/journals/mac
2. https://www.journals.elsevier.com/journal-of-macroeconomics
3. https://www.sciencedirect.com/handbook/handbook-of-macroeconomics
4. http://www.econport.org/content/handbook.html

ECO 204 Public Finance

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- Conceptualise, explain and give examples of concepts of public goods and externality
- Understand and explain the role of government according to economic theory
- Identify and distinguish between various sources of Public Revenue and assess the impact and incidence of taxation
- Identify various features of Indian Tax system.
- Understand and explain concepts related to Public Expenditure, Public Debt and the Budget.
- Explain Fiscal Federalism and identify constitutional features of Centre-State Financial Relationships.

Unit 1 Nature and Scope of Public Finance.Concepts of Private, Public and Merit Goods.Role of government in the economy.Principle of maximum social advantage.

Unit 2 Sources of Public Revenue.Choices of Taxes: Proportional v/s Progressive taxes, Direct V/s Indirect taxes. Canons of Taxation. Incidence and Impact of a tax: Basic concepts, Theories of tax shifting. Various factors influencing the incidence and shifting of a tax.

Unit 3 Justice in Taxation: Benefit and Ability to Pay Approaches. Salient Features of Indian Tax System. Public Expenditure: Factors influencing Public expenditure, Wagner's Law and the Peacock Wiseman Hypothesis.

Unit 4 Public Borrowing: Sources, Burden of Internal and External Public debt. Methods of debt redemption.

Budget Concepts: Revenue and Capital Budget, Concepts of Budget Deficits. Fiscal Policy: Objectives, Instruments and Limitations.

Unit 5 Fiscal Federalism: Principles of federal finance, constitutional provisions in India. Centre –State Financial Relations in India.

Recommended Books:

1. Bhatia, H. L. (1993). *Public Finance*. New Delhi: Vikas Publishing House.

2. Misra, B. (1981). *Economics of Public Finance*. New Delhi: South Asia Books.

3. Musgrave, Richard A. (1959). *Theory of Public Finance.* Kognakhusa, Tokyo: McGraw Hill.

4. Stiglitz, J.E. (2000). *Economics of Public Sector*. (3rd Ed.). New York: W. W. Norton & Company.

5. Tyagi, B.P. (2016). *Public Finance.* Meerut: Jai PraksashNath& Company.

6. Ulbrich, H. (2002). *Public Finance in Theory and Practice*. New York: Routledge.

E-LearningMaterial:

1. https://www.indiabudget.gov.in/
2. https://www.nipfp.org.in/home-page/
3. https://dea.gov.in/indian-public-finance-statistics
4. http://www.publicfinance.in/site/indexandbook.html

Fifth Semester

ECO 303 Indian Economy – I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Understand the historical background of colonial economy.

- Explain the nature and characteristics of Indian Economy.

- Understand the evolution of Indian Planning, its strategies, objectives and failures.
- Analyze the development of physical and social infrastructure in India.
- Analyze Institutional Reforms in Indian Agriculture.
- Analyze issues of agriculture finance and marketing in India

Unit 1 A brief historical background of colonial economy.

Basic features of Indian Economy – as an underdeveloped, developing and mixed economy.

Unit 2 Planning in India: strategies, objectives, Achievements and failures of five year plans, latest five year plan details.

Unit 3 Physical and Social Infrastructure Development in India – power, irrigation, health and education

Unit 4 Agriculture sector in India: Land Reforms (institutional reforms) in India: abolition of intermediates, tenancy reforms and ceiling of land holdings, Causes of land, sub-division and their measures. The green revolution, productivity in agriculture sector.

Unit 5 Agriculture labour, food security, public distribution system, agriculture price policy in India. Agriculture finance and agriculture marketing.

Recommended Books:

1. Dutt, R. and Sundaram, K.P.M. (2000). *Indian Economy*. New Delhi: S. Chand & Co.

2. Jha, R. (2018). *Facets of India are Economy and Her Society* Volume--II: Current State and Future Prospects. United Kingdom: Palgrave Macmillan.

3. Jha, R. (2018). *Facets of India's Economy and Her Society*. Volume-I: Recent Economic and Social History and Political Economy. United Kingdom: Palgrave Macmillan.

4. Kapila, U. (2005). *Indian Economy: Issues in Development and Planning & Sectoral Aspects*. New Delhi: Academic Foundation.

5. Misra, S.K. and Puri, V.K. (2011). *Indian Economy*. New Delhi: Himalaya Publication House

E-Learning Material:

1. http://personal.lse.ac.uk/ghatak/landref.pdf

2. http://re.indiaenvironmentportal.org.in/files/food%20security%20in%20india.pdf

3. https://www.iisd.org/pdf/2006/climate_designing_policies_chap5.pdf

Sixth Semester

ECO 304 Indian Economy – II

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- Understand importance and problems of Industrial sector in India.
- Analyse composition and direction of foreign trade and foreign trade policy in India.
- Understand the concept of poverty and unemployment.
- Evaluate the policies related to poverty, unemployment and inflation in India.

Unit 1 Industrial sector in India: Characteristics, contribution and problems. Industrial policy (pre and post reforms period), public enterprises and issues of privatisation. Policy measures for SSI's.

Unit 2 Service Sector in India: Growth and Characteristics. Foreign trade composition and direction. Globalization and Foreign trade policy (EXIM) after 1991.

Unit 3 Balance of payment problem in India. Foreign capital: classification, need and problems. MNCs and their impact on Indian Economy.

Unit 4 Problem of poverty: concept causes and poverty eradication programmes.

Nature and causes of unemployment in India, some important schemes to reduce unemployment.

Unit 5 Problem of inflation in India and RBI's recent monetary policy. Population problem, policy measures and government programmes.

Recommended Books:

1. Jha, R. (2018). *Facets of India are Economy and Her Society* Volume--II: Current State and Future Prospects. United Kingdom: Palgrave Macmillan.

2. Jha, R. (2018). *Facets of India's Economy and Her Society*. Volume-I: Recent Economic and Social History and Political Economy. United Kingdom: Palgrave Macmillan.

3. Kapila, U. (2005). *Indian Economy*: Issues in Development and Planning & Sectoral Aspects. New Delhi: Academic Foundation.

4. Misra, S.K. & V.K. Puri (2011). *Indian Economy*. New Delhi: Himalaya Publication House.

5. Ruddar, D. & K.P.M. Sundaram. (2000). *Indian Economy*. New Delhi, India: S. Chand & Co.

E-Learning Material:

1. http://www.asercentre.org/Keywords/p/315.html

2. http://www.nuepa.org/new/Annual%20Reports.aspx

3. http://rchiips.org/nfhs/factsheet_NFHS-4.shtml

Discipline Electives

ECO 305 International Economics

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Discuss and explain trade policy issues such as protectionism and free trade.

- Understand and apply the principle of comparative advantage.

- Apply partial equilibrium models in analysing the economic effects of trade policy instruments such as tariffs and quotas.

- Understand the concept of BoP and its disequilibrium.

- Critically analyse different theories of determination of exchange rate.

- Appreciate the role of international organizations such as IMF, World Bank,WTO, UNCTAD

Unit 1 The Nature of International Trade, Free Trade Vs Protection. Theories of International trade: classical and opportunity cost theories.

Unit 2 Terms of Trade – meaning and types. Tariffs – effects of tariffs under partial equilibrium conditions, Types and Effects of Import Quota.

Unit 3 Balance of Payments - Meaning and Structure, Disequilibrium in Balance of Payments – Meaning, Types and causes, Measures to control disequilibrium in BOP.

Unit 4 Theories of determination of Exchange Rate – Mint Parity Theory, Purchasing Power Parity Theory, Balance of Payment Theory of Exchange Rate. Fixed vs. Flexible Exchange Rate.

Unit 5 Exchange Control – Meaning, Objectives and Methods, International Institutions: IMF, World Bank, WTO, UNCTAD.

Recommended Books:

1. Bhagwati, J. (1981), *International Trade*, Selected Readings, (Ed.) Cambridge University Press, Mass.

2. Cherulinam, F. (2006). *International Economics*. New Delhi: McGraw Hill Education (India) Private Limited.

3. Krugman, P.R. and Obstfeld, M. (2008). *International Economics*: Theory and Policy, London: Pearson.

4. Mannur, H.G. (1995). *International Economics*. New Delhi: Vikas Publising House.

5. Salvatore, D. (1997). *International Economics*. S Upper Saddle. River, N.J: Prentice Hall.

6. Sodersten, Bo. (1991). *International Economics*. London: The Macmillan Press Ltd.

E-Learning Material:

1. https://www.sciencedirect.com/handbook/handbook-of-international-economics
2. https://dgft.gov.in/more/data-statistics
3. https://dipp.gov.in/publications/fdi-statistics
4. https://www.wto.org/english/thewto_e/thewto_e.htm
5. https://unctad.org/en/Pages/aboutus.aspx

ECO 301 Development Economics and Environment

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- Acquire a basic understanding of the issues and on-going debates on development economics.
- Discuss the important theories in economic development and their policy implication.
- Demonstrate a basic knowledge of the role of market and market failure with regard to the allocation of natural resources and environmental amenities.
- Analyze and interpret the environmental implications of economic decisions
- Understand the nature and scope of contemporary environmental debates

Unit 1 Meaning of Economic Growth and Development. Measures of Economic Development.Characteristics of Underdeveloped Economies. Obstacles to Economic Development.

Unit 2 Factors helping Economic Development; Natural Resources, Population, Human Capital, Physical Capital and Technology.

Unit 3 Characteristics of Modern Economic Growth. Theories of Economic Growth: Rostow's Stage Theory, Balanced and Unbalanced Growth.

Unit 4 Theory of Big Push, Critical Minimum Effort Theory, Nelson's Low-level Equilibrium Trap Theory.

Unit 5 Interrelationship between environment and economic development. Sustainable development – Concepts, Indicators and Measurement. Global environmental issues - The Global concern, Policy options in developing and developed countries.

Recommended Books:

1. Higgins, B. (1968). *Economic Development*. New York: W. W. Norton & Co.
2. Kindleberger, C.P. (1965). *Economic Development*. New York: McGraw-Hill Book Company.

3. Mishra, S. K., & V. K. Puri (2010). *Economics of Development and Planning-Theory and Practice*. New Delhi: Himalaya Publication House.

4. Thirlwall, A.P. (2005). *Growth and Developmen.* New York: Palgrave McMillan.

5. Todaro, M. P. (1969). *Economic Development in the Third World.* New York: Longman Inc.

E- Learning Material:

1. https://www.iisd.org/library

2. http://projekty.osu.cz/igeography/docs/Euromodel ENVIRONMENT%20AND%20DEVELOPMENT.pdf

3. http://www.globalissues.org/issue/168/environmental-issues

4. https://www.ukessays.com/essays/economics/barriers-indias-economic-development-3066.php

ECO 306 Economics of Social Sector

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Understand basic concepts of Social Sector.

- Analyze Problems and Opportunities in Social Sector.

- Cost and returns of Social Sector

- Understand pattern of expenditure on health and education.

- Analyze association between Human capital and Economic Growth.

Unit 1 Economics of education: definition, meaning, scope and importance; The relationship between education and the economic system. Cost of Education;Social and private returns on education.

Unit 2 Financing of education: public private partnership: Priorities withing education in the various five year plans. Spill Over and Inter Generation effects of education.Linkages among education, skills and jobs.

Unit 3 Need and scope for foreign participation in education.Education and Economic Development. Economics of Health: meaning and

scope;Western System of Medicine; Indian System of Medicine: AYUSH.

Unit 4 Economic determinats of health care; Human capital approach: measurement of mortality; value of statistical life, years of life lost; morbidity valuation: cost of illness.Public expenditure on health.

Unit 5 Burden of disease: Meaning and Significance, DALY and QALY: Framework and measure of burden; Recent Initiatives in Health Sector. Health and Economic Growth.

Recommended Books:

1. Akinyemi, S. (2013). *The economics of education.* Strategic Book Publishing.

2. Bhattacharya, J., Hyde, T. and TU, P. (2013). *Health Economics*, The Palgrave Macmillan.

3. Dreze , J. (2016). *Social Policy(EPW),* Oreiantal Black Swan

4. Dreze, J. & Sen, A. (1999). *India: Economic development and social opportunity*. OUP Catalogue.

5. Jimenez, E. (1995). *Human and physical infrastructure: Public investment and pricing policies in developing countries.* Handbook of development economics, 3, 2773-2843.

6. Jones, A. M., Culyer, A. J. & Newhouse, J. P. (2000). Handbook of health economics. Edited by: Culyer A, Newhouse J. UK: Elsevier Science, 6, 267-344.

7. Folland, S., Goodman, A. C. & Stano, M. (2007). *The economics of health and health care* (Vol. Upper Saddle River, NJ: Pearson Prentice Hall.

8. Mukherjee, A. (2007). *Implications for Education,* Economic & Political Weekly, Volume XLII No., PP 1273-1276.

9. Tilak, J. B., Panchamukhi, P. R. & Biswal, K. Statistics on Education.

10. UlHaq, M. (1995). *Reflections on human development*. oxford university Press.

E- Learning Material

1. http://archive.mu.ac.in/myweb_test/ma%20edu/M[1].A._EDU _ECONOMICS_OF_EDU.-Final_1_2011-12.pdf

2. http://164.100.47.193/intranet/BUDGET.pdf

3. http://www.ncee.org/wp-content/uploads/2013/10/India-Education-Report.pdf
4. https://www.who.int/gho/mortality_burden_disease/en/
5. http://ayush.gov.in/sites/default/files/Introduction_2.pdf

ECO 308 History of Economic Thought

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: On successful completion of the course, students will be able to:

- Comprehend the development of the theory of economics in historical perspective.
- Grasp emerging paradigms and aberrations with its reasons.
- Analyze similarities and differences among different economic schools of thoughts

Unit-1 The nature and significance of economic thought; Pre-classical economic thought: Mercantilism- emergence, main principles, the importance of foreign trade; Physiocracy- natural order, agriculture and net product.

Unit-2 Classical economics: Adam Smith- Theory of value, theory of production and capital accumulation, D. Ricardo- Theory of value and theory of distribution, T.R. Malthus - Theory of population, John Stuart Mill - Principles of political economy, Ricardo - Malthus Controversy over Glut.

Unit-3 K. Marx- Theory of surplus value, Capital accumulation and crisis, breakdown of capitalist system; Subjectivism and Marginalism: Essential features of marginalism, Jevons' theory of Value, Bohm Bawerk's theory of capital.

Unit-4 A. Marshall and his contribution, Walras' Theory of general equilibrium; Economics of welfare: A.C. Pigou, V. Pareto; J. M. Keynes and his policies.

Unit-5 Indian ancient economic thought: Kautilya's arthshastra; Economic thought in modern India: Dadabhai Naoroji, Mahatma Gandhi, B.R. Ambedkar, Amartya Sen.

Recommended Books:

1. Backhouse, R.E. (1985). *History of Modern Economic Analysis*. Oxford: Basil Blackwell.
2. Bhatia, H. L. (2009). *History of Economic Thought*. Delhi: Vikas Publishing House Pvt. Ltd.
3. Blaug, M. (1997.). *Economic Theory in Retrospect*. Cambridge: Cambridge University Press.
4. Ganguli, B.N. (1977). *Indian Economic Thought: A Nineteenth Century Perspective*. New Delhi: Tata McGraw-Hill Publishing Co.
5. Gide, C. and G Rist. (1956). *A History of Economic Doctrines*. New Delhi: Academic Foundation.
6. Gray, A. and Thompson A. (1980). *The Development of Economic Doctrines*. London: Longman.
7. Haney, L.H. (1913). *A History of Economic Thought*. New York: Macmillan.
8. Hunt, E.K. and Lautznenheiser, M. (2017). *History of Economic Thought: A Critical Perspective*, New York: Routledge, Taylor & Francis Group, Reprint.
9. Medema, S.G. and Samuels, W.J. (2003). *The History of Economic Thought: A Reader*. London: Routledge, Taylor & Francis Group.

E- Learning Material

1. www.policonomics.com/lp-classical-economics-mercantilism
2. en.citizendium.org/wiki/History_of_pre-classical_economic_thought
3. https://www.marxists.org/archive/marx/works/.../theories...value
4. ublishing.cdlib.org/ucpressebooks/view?docId=ft367nb2h4
5. economics.illinoisstate.edu/ntskaggs/eco372/.../alfred_marshall.htm
6. www.academia.edu/3836527/Walrasian_General_Equilibrium_Theory

ECO 309 Econometrics and Data Analysis

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- Understand various concepts related to hypothesis testing and their application in economic research.
- Describe the steps in Econometric Research

- Formulate and Estimate simple linear regression model and interpret the coefficients
- Describe various types of Econometric Data
- Use Selected Database and statistical softwares for Economic Analysis

Unit I Concept of Test of Significance-Formulation of Hypothesis, Types of Errors, Level of Significance. Applications of Z and t -test

Unit II Scope and Methodology of Econometrics. Simple linear regression model: Two variable case. Assumptions of Classical Regression Model. Ordinary least squares estimation of a linear model.

Unit III Statistical properties of least square estimates. Multiple linear regression models. Use of Dummy Variables. Introduction to Logistic Regression.

Unit IV Violations of classical assumptions: Consequences, detection and remedies for Multicollinearity; heteroscedasticity and serial correlation.

Types of Data for Economic Analysis- Cross Section, Time Series and Panel.

Unit V Introduction to Selected Database for Economic Analysis- World Development Indicators, International Financial Statistics, RBI Handbook of Statistics on Indian Economy, UNDP Human Development Report.

Introduction to Statistical Softwares- SPSS and EViews. Hands-on experience in estimation and interpretation of economic relationships using regression with SPSS and Eviews.

Recommended Books:
1. Gujarati, D.N. (2009). *Basic Econometrics*. McGraw Hill Publications.
2. Koutsoyiannis, A. (2001). *Theory of Econometrics*. Palgrave Macmillan Limited.
3. Koop, G. (2000). *Analysis of Economic Data*. NJ: Wiley.
4. Cleff, T. (2014). *Exploratory Data Analysis in Business and Economics*. Switzerland: Springer International Publishing.

E Learning Material:
1. https://www.princeton.edu/~mwatson/Stock-Watson_4E/eviews_tutorial_10_1.1.pdf
2. https://www.spsstutorials.com/basics/https://www.princeton.edu/~mwatson/StockWatson_4E/eviews_tutorialpdf

English Literature
First Semester

ENGL 105 Prose and Short Stories

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- exhibit a fair knowledge of the development of English essay/short story as literary genre(s);
- develop critical thinking by analysing texts;
- exhibit word power with use of idiomatic expressions and wide vocabulary;
- communicate effectively in all forms of social interaction;
- inculcate effective citizenship with a deep grounded sense of ethics and moral dimensions.

Course Content:

Unit I

1. **Bacon** : Of Studies, Of Travel
2. **Addison** : Meditations in Westminster Abbey, Sir Roger at Home

Unit II

3. **Oliver Goldsmith** : Beau Tibbs
4. **Charles Lamb** : Old China
5. **G. K. Chesterton** : On the Pleasures of Being No Longer Young

Unit III

6. **Aldous Huxley** : Selected Snobberies
7. **J.B. Priestley** : On Getting off to Sleep

Short Stories

Unit IV

1. **K. A. Abbas** : Sparrows
2. **Maxim Gorky** : The Mother of a Traitor
3. **W.S. Maugham** : The Verger

Unit V   Background Topics

Montaigne's concept of essay, Essays in eighteenth century, Essays and the development of knowledge, Development of short stories

Note : The background topics are to be discussed in relation to the essayist(s) and the context

Recommended Readings:

- Arthur, E. Walzer (2003). *George Campbell: Rhetoric in the Age of Enlightenment*. State University of New

- Abrams, M. H. & Geoffrey, Galt Harpham, (2012). *A Glossary of Literary Terms*, 10th ed. Wadsworth

- Carl, H. Klaus, (1968). *Style in English Prose*,

- Carolyne Lee *Word Bytes: (2009. Writing in the Information Society*.

- Akmajian, et al, (2001). *Linguistics: An Introduction to Language and Communication*. MIT Press.

Suggested e-resources:

- Historical Development of Prose

  https://www.jstor.org/stable/2919117?seq=1#metadata_info_tab_contents

- Philosophy of Short Stories

  https://archive.org/stream/philosophys/

- Themes of Short Stories

  https://www.jstor.org/

ENGL 106 Romantic Poetry

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- understand the meaning, form, and function of different theoretical and philosophical strands of Structuralism, Post-structuralism, Marxism, New Historicism etc.;

- analyze the historical, political and aesthetic milieu of the romantic age;

- develop creative and critical thinking;
- enhance writing skills;
- inculcate humane values and ethics through the given poems;
- engage themselves in the praxis of applying those theoretical and philosophical underpinnings for the analysis of a particular poem.

Course Content

Unit I

1. William Blake : The Tyger, **T**he Lamb, London**,** The Divine

Unit II

2. William Wordsworth : The Solitary Reaper, Lucy Gray, The World is Too Much with Us; One summer evening, Daffodils

Unit III

3. S.T. Coleridge : Youth and age, Frost at Midnight

4. Lord Byron : When We Two Parted, She Walks in Beauty

Unit IV

5. John Keats : Ode to Autumn; Ode to Nightingale; On First Looking into Chapman's Homer; Bright Star Would I were steadfast

6. P.B.Shelley : Ozymandias, When the Lamp is Shattered

Unit V   Background Topics :

Romanticism in Context: German Idealism; Enlightenment**;** Reason and Imagination**;**The Concepts of Nature**;** The French Revolution; The Gothic Element in Romantic poetry

Note: The background topics are to be discussed in relation to the poet(s) and the context

Recommended Readings:

1. Boultan, M. (1989). *The Anatomy of Poetry*. Oxford: Oxford University Press.

2. Abhrams, M.H. (2000) . *A Glossary of Literary Terms*. New Delhi: Pearson.

3. Cuddon, C.A. (2001). *The Penguin Dictionary of Literary Terms and Literary Theory*. New Delhi: Penguin.

4. Howthorn, Jeremy. (2000). *A Glossary of Contemporary Literary Theory*. London: Bloomsbury Academic

Suggested e-resources:

- Introduction to Romanticism
  https://plato.stanford.edu/entries/transcendentalism/
- Philosophy and Romantic Poetry
  https://ocw.mit.edu/courses/literature/21l-476-romantic-poetry
- Romantic Poets and Romantic Poetry
  https://www.jstor.org/

Second Semester

ENGL 104 Fiction

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

- understand the social and literary context of the Victorian world and its anxieties about modernity, capitalism and gender issues;
- analyze, discuss and write critically about the use of social realism in literature;
- analyse and interpret the work of a range of Victorian novelists;
- understand the various elements of long fiction;
- understand the interdisciplinary area of science and literature;
- identify and discuss theoretical discourses concerning class, sexuality, and gender in literary texts;
- comprehend and successfully apply a range of terms and concepts integral to literary studies.

Course Content:

Unit I Jane Austen   -   *Pride and Prejudice*

Unit II Charles Dickens   -   *Great Expectations*

Unit III Thomas Hardy   -   *The Mayor of Casterbridge*

Unit IV H.G. Wells   -   *Time Machine*

Unit V   **Background Topics**

An introduction to British Feminism; Power Politics and Female Subjectivity; An introduction to Aristotle's concept of tragedy Sci-fi, Nihilism, Fatalism, Democratization of tragedy, Class, Base and Superstructure, Capitalism

Note: Background Topics are to be discussed in relation to the novelist(s) and the context.

Recommended Readings:

- Austen, Jane & Carol, Howard. (2003). *Pride and Prejudice*. New York: Barnes & Noble Classics Collection.

- Well, H.G.(1895) . *The Time Machine* William Heinemann.

- Thomas, Hardy, Dale Kramer. *(*2004) *The Mayor of Casterbridge.* OUP: UK,. Print.

- Child, Peter and Roger Fowler. (1973). *The Routledge Dictionary of Literary Terms*.

- Abhrams, M.H. *A Glossary of Literary Terms*. (2000). New Delhi: Pearson.

- Cuddon, C.A. (2000). *The Penguin Dictionary of Literary Terms and Literary Theory.* New Delhi: Penguin, 2000. Print.

- Howthorn, Jeremy.(2000). *A Glossary of Contemporary Literary Theory*. London: Bloomsbury Academic.

- Jordan, John O., ed. (2001). *The Cambridge Companion to Charles Dickens*. Cambridge University Press.

- Paroissien, David. (2000). *The Companion to Great Expectations*. No. 7. Liverpool University Press

Suggested e-resources:

- Fiction: Naturalism and Realism

  http://oxfordre.com/literature/view/10.1093/acrefore/9780190201098.001.0001/acrefore-9780190201098-e-509

- Philosophy and Fiction

  https://ocw.mit.edu/courses/linguistics-and-philosophy/24-01-classics-of-western-philosophy-spring-2016/

- Modern Fiction

  https://wizzwoo.com/download.php?q=the-cambridge-introduction-to-modern-british-fiction-19502000-head-dominic

- Jane Austin and realist novel
  http://www.egyankosh.ac.in/bitstream/123456789/22362/1/Unit-1.pdf
- Thomas Hardy and Mayor of Caster bridge
  http://egyankosh.ac.in/bitstream/123456789/27428/1/Unit-21.pdf

ENGL 107 Victorian Poetry

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- apply the knowledge of the theoretical discourses based on the social and literary history of the age to a range of texts specifically, Victorian poetry;
- identify the trends of Victorian literature in relation to the advent of science , democratic ideals, Victorian morality, new education etc.;
- analyze literary texts of Victorian age critically keeping in mind the anxiety of the Victorian age;
- explicate their views in terms of the prevailing traits of the preceding and succeeding age of Victorian era.

Course Content:

Unit I

1. Alfred, Lord Tennyson : In Memoriam Book-I. The Lady of Shallot, Maud

2. Robert Browning : Rabbi Ben Ezra, Meeting at Midnight, Grammarian's Funeral, Saul

Unit II

3. Mathew Arnold : Dover Beach, To Marguerite , Scholar Gypsy

Unit III

4. Thomas Hardy : Darkling Thrush, Afterwards, The Voice, Men who March Away, We Are Getting to the End

Unit IV

5. G. M. Hopkins   :   Thou Art Indeed Just, Lord, Spring and Fall: To a Young Child

Unit V Background Topics:

Utilitarianism, Dramatic Monologue, Barbaric, Philistine, and Populous, Transitional poetry, Inscape and Instress, Sprung Rhythm

Note: Background Topics are to be discussed in relation to the poet(s) and the context.

Recommended Readings:

1. *Fifteen, Poets* (1997). Oxford : Oxford University Press
2. Palgrave, Frances T. (1861). *The Golden Treasury of English Verse*, Macmillan.
3. Hayward, John. (1973). *The Penguin Book of English Verse*, Penguin.
4. Boultan, M. (1989). *The Anatomy of Poetry*. Oxford: Oxford University Press.
5. Abhrams, M.H. (2000). *A Glossary of Literary Terms*. New Delhi: Pearson.
6. Cuddon, C.A. (2001). *The Penguin Dictionary of Literary Terms and Literary Theory.* New Delhi: Penguin.
7. Howthorn, Jeremy. (2005). *A Glossary of Contemporary Literary Theory*. London: Bloomsbury Academic

Suggested e-resources:

- Victorian Poetry
  https://www.uta.edu/english/tim/courses/3352f01/vic.html
- Victorian Poetry and Tennyson
  http://www.victorian-era.org/victorian-era-poetry-characteristics.html
- Robert Browning
  http://www.agdc.ac.in/pdf/resource/robert_browning.pdf

Third Semester

ENGL 201 American Literature

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Learning Outcomes: On successful completion of the course, students will be able to:

- appreciate and evaluate the literary history of America;
- recognize the human experiences reflected in the works;
- develop appreciation and understanding of American culture
- demonstrate knowledge and understanding of a range American writing in its historical and cultural contexts;
- demonstrate improvement in critical writing and critical thinking skills through the analysis of American literary texts;
- enhance their communication skills;
- Inculcate effective citizenship with a deep grounded sense of ethics and moral dimensions.

Course Content:

Unit I

1-. Robert Frost   :   Stopping by Woods on a Snowy Evening, Road not Taken, Birches.

Unit II

2. Emily Dickinson   :   I Felt a Funeral in My Brain, A Bird Came Down a Walk, I felt a Cleavage in My Mind.

Unit III

3. Tennessee Williams   :   The Glass Menagerie

Unit IV

4. Ernest Hemingway   :   The Old Man and the Sea.

Unit V   Background Topics:

    Concepts of Monism and Dualism, Question of Existence, The Great Chain of Being, Nature and Culture, Transcendentalism, Concept of Nada.

Note: Background Topics are to be taught and discussed in consonance with the texts, context and poets prescribed.

Recommended Readings:

1. Cox, J. M. (Ed.). (1962). *Robert Frost: a collection of critical essays* (Vol. 3). Prentice Hall.

2. Pickard, J. B. (1967). *Emily Dickinson: an introduction and interpretation*. New York: Holt, Rinehart and Winston.

3. Singh, R. N. (2001). *Ernest Hemingways The Old Man And The Sea*. Atlantic Publishers & Dist.

4. Donaldson, Scott (2000). *The Cambridge Companion to Hemingway.* Cambridge CUP.

5. Mathew Rowdane (2002). T*he Cambridge Companion to Tennessee William*. Cambridge. CUP.

Suggested e-resources:

- Robert Frost

  https://lsa.umich.edu/content/dam/hopwoodassets/documents/Hopwood%20Lectures/

- Emily Dickinson

  http://shodhganga.inflibnet.ac.in/bitstream/10603/61175/6/06_chapter%201.pdf

- Tennessee Williams

  https://www.jstor.org/stable/3197002?seq=1#metadata_info_tab_contents

ENGL 202 Drama

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- appreciate drama as a genre of literary expression;

- have an understanding of drama of the Renaissance and Restoration period;

- acquaint themselves with the terminologies relevant to the texts to interpret this genre in the backdrop of actual staging;

- understand the various constituents of the performance of the Shakespearean tragedies and the Restoration comedies.

Course Contents:

Unit I

1.   *Everyman* (Non-Detailed)

Unit II

2.   Ben Jonson- *The Alchemist*(non-detailed)

Unit III

3.   William Shakespeare-

     Macbeth (Detailed Study)

Unit IV

4.   R B Sheridan

     The Rivals (Detailed Study)

Unit V   Background Topics:

   Mimesis, Nemesis, Plot, Catharsis, Character, Diction, Denouement, Narrative, Pity, Spectacle, thought, Tragedy, Tragedy and the Politics of Power, Three Unities, Anti sentimental Comedy, Farce, Malapropism, Comedy of Manners.

Note: Background Topics are to be taught and discussed in consonance with the texts, context and dramatists prescribed

Recommended Readings:

1.   Bradley. A.C. (1998).*Shakespearean Tragedy*. London, Palgasra.

     Evans, lfor. (1998).*A Short History of English Drama*. London, Routledge.

2.   Davison. Peter. (1986). *Sheridon : Comedies*. London: CUP.

     Abhrams, M.H. (2000). *A Glossary of Literary Terms*. New Delhi: Pearson.

3.   Cuddon, C.A. (2001). *The Penguin Dictionary of Literary Terms and Literary Theory*. New Delhi: Penguin.

4.   Howthorn, Jeremy. (2000*). A Glossary of Contemporary Literary Theory*. London: Bloomsbury Academic.

5.   Aristotle. (1996). *Poetics*. New Delhi: Penguin Classsics.

6.   Child, Peter and Roger Fowler. (1982). *The Rouledge Dictionary of Literary Terms*. London:Routledge.

7.   Harp, Richard L., Richard Harp, and Stanley Stewart, eds. (1986).*The Cambridge Companion to Ben Jonson*. London: Cambridge University Press.

Suggested e-resources:

* Philosophy and Tragedy

  https://static1.squarespace.com/static/Philosophy_andTragedy__W arwick_Studies_in_European_Philosophy

* Themes of *Macbeth*

  https://cdn2.rsc.org.uk/sitefinity/education-pdfs/themes-resources

* Themes of *The Rivals*

  https://www.jstor.org/stable/2739338?Search=yes&resultItem Click

Fourth Semester

ENGL 205 Grammar

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On successful completion of the course, students will be able to:

* know the nature, form, and function of language;
* use language effectively;
* learn grammar as a rule governed behaviour;
* develop an insight into the structure of English language;
* assimilate the correct patterns of the language.

Course Content:

Unit I   Word classes: Open and Close types.

Unit II Phrases : Noun Phrase, Adjective, Verb phrase, Adverb Phrase, Prepositional phrase

(Structure and function of phrases)

Unit III Clauses - Finite and Non-finite clauses

(Structure and function of clauses)

Unit IV Compound sentences (Coordination, Features of Coordinators, Coordinating Conjuctions, Uses of Coordinators)

Unit V Complex sentences (Subordinating Conjuctions, Superordinate, Matrix, Subordinate Clause, Subordinate Clause :Types and Syntactic Functions)

Recommended Readings:

1. Ronald, Carter & Michael, McCarthy.(*1*980). *Cambridge Grammar of English.* London: Cambridge University Press

2. Quirk, and Sydney, Green Baumm (1989).: *A Student's Book of English Grammar.* London: Longman.

3. Leech, and Svartvik. (2000)   *A Communicative Grammar of English.* London: (Longman)

4. Geoffrey, Leech :1980 *English Grammar for Today : A New introduction.* London: : Macmillan

Suggested e-resources:

- Word Classes

  https://www.fluentu.com/blog/english/learn-english-grammar-online/

- Phrases

  https://learnenglish.britishcouncil.org/english-grammar

- Sentence Types and Structures

  https://elt.oup.com/student/oxfordenglishgrammar/?cc=global&selLanguage=en

ENGL 206 Indian Writing in English

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- relate the major literary movements of India and their influence on Indian literature;

- demonstrate knowledge of the select texts and traditions in the specific social, cultural and historical context;

- analyse the literary texts with specific reference to cultural and political developments in India's colonial and post-colonial history;

- inculcate the concept of nationalism through literary texts;

- communicate effectively in all forms of social interaction;

- inculcate effective citizenship with a deep grounded sense of ethics and moral dimensions.

Course Content:

Unit I   Rabindranath Tagore : From Gitanjali - Nos. 8,11,19,36 & 50

Unit II Sarojini Naidu : The Souls Prayer, Village Song, Summer Woods, Songs of Radha - The Quest, Caprica.

Unit III Girish Karnad : Tughlaq

Unit IV Arun Joshi : The Foreigner

Unit V **Background Topics:**

Mysticism, Kabbalism, Concept of soul and self, Historicism, Existentialism; Alienation, Disillusion, Angst, Freedom, Choice, Nation and Identity, Fracturedness, Multiplicity of Identity

Note: Background Topics are to be taught and discussed in consonance with the texts, context and novels and plays prescribed

Recommended Readings:

1. Srinivas, I. K. (1990). *Indian Writing in English*. Sterling Publishers

2. Dhawan, R. K. (1986). *The Fictional World of Arun Joshi*. Classical Pub. Co

3. Gupta, Rameshwar. *Sarojini Naidu: The Poetess*. New Delhi: Prestige, 1980.

4. Childs, P. & Fowler, R. (2006). *The Routledge Dictionary of Literary Tterms*. Routledge

5. Olson, R. G. (2012). *An Introduction to Existentialism*. Courier Corporation.

Suggested e-resources:

- Rabindranath Tagore
  https://swayam.gov.in/

- Sarojini Naidu
  http://shodhganga.inflibnet.ac.in/

- Girish Karnad
  https://www.jstor.org/

- Arun Joshi
  https://muse.jhu.edu/

- Arun Joshi   as a Novelist
  https://www.jstor.org/stable/23330214?seq=1#metadata_info_tab_ contents

Fifth Semester

ENGL 304 Modern Fiction

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: On successful completion of the course, students will be able to:

- develop an insight into the genre of fiction and art of fiction writing;
- understand the humanitarian aspects expressed in novels from around the world and to draw a comparative perspective of cross-cultural social, economic and political experiences;
- recognize terminologies identified in various literary texts across cultures;
- apply perspectives gained from literature to personal and global situations;
- evaluate various interpretations of a text and their validity over time.

Course Content:

Unit I   Chinua Achebe   -   *Things Fall Apart*

Unit II   Shashi Deshpande -   *That Long Silence*

Unit III George Orwell   -   *Animal Farm*

Unit IV   David Malouf   -   *An Imaginary Life*

Unit V   **Background Topics:**

Imperialism, colonialism, capitalism, Postcolonialism, Feminism, Capitalism, Political Allegory and Linguistic Determinism

Note: The background topics are to be taught and discussed in consonance with the texts, contexts and authors prescribed.

Recommended Readings:

1. Lindfors, Berth (1995). *South Asian Responses to Chinua Achebe.* New Delhi : Prestige.
2. Khayoom, S.A. (1990). *Chinua Achebe : A Study of His Novels*. New Delhi : Prestige.
3. Adibur, Rehman (2000). *George Orwell: A Humanistic Perspective*. New Delhi: Atlantic.

4. Prasad, A.N. (2005). *Critical Response to Indian Fiction in English*. New Delhi: Atlantic.

5. Loomba, Ania. (2001). *Coloniatism/Postcolonialixm : A Critical Idiom.* London: Routledge.

6. Birns, Nicholas, and Rebecca, McNeer, eds. (2007). *A Companion to Australian Literature Since 1900*. Camden House.

Suggested e-resources:

- Postcolonialism

  https://www.google.com/search?ei=vIxFXI2jHaWYvQT0hIS4Dg &q=postcolonialism+swayam#

- Culture in Chinua Achebe's Things Fall Apart

  https://www.google.com/search?ei=zIxFXIq3LsnUvASD2I3IAQ &q=things+fall+apart+jstor&oq=things+fall+apart+jstor#

- Indian Writing in English and Indian English Novel

  https://swayam.gov.in/courses/5748-indian-writing-in-english

- Feminism and Modern Indian Literature

  https://www.jstor.org/stable/23339720

Sixth Semester

ENGL 308 Literary Movements: History of Ideas

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On successful completion of the course, students will be able to:

- understand some major concepts which are related to metaphysics, epistemology, and aesthetics.

- develop critical thinking.

- nurture dialectical thought process that may enable them to communicate effectively by placing anti-thesis to some given thesis.

- contribute in enriching the intellectual history of our country.

- unleash the potential of students and to bring them on an enriching path of lifelong learning.

Unit I   Ideas on the process of knowledge formation

Romanticism and the process of knowledge formation particularly in William Blake, William Wordsworth, S.T.Coleridge and John Keats.

Modernism and the process of knowledge formation: Characterstic features of Modernism with reference to T.S Eliot and Virginia Woolf

Structuralism and Ferdinand de Saussure's four major dichotomies.

Poststructuralism and the major ideas of: Ronald Barthes- Sign Julia Kristeva- Intertextuality Jacques Derrida- Difference and Free Play

Unit II   Ideas on the realities of Art and Aesthetics

Art for art's sake: Aestheticism

Formalism (basic ideas)

Art and Society (basic id

Unit III Ideas on Language/System/Text/Reader

Phenomenology and its major arguments

Reader-Response Theory (Basic arguments)

Deconstruction (Major arguments)

Unit IV Ideas on ideology and identity

Marxism, Feminism and Gender Studies (major arguments)

Psychoanalysis and its various forms (Freud, Lacan and Kristeva)

Postcolonial Studies (Edward Said and Bhabha)

Unit V   Ideas on Culture/Ethnicities/Locations

Cultural Studies (Major arguments)

Native and Indigenous Studies (Major arguments)

Diaspora Studies (major arguments)

Recommended Readings:

1. Morri, Pan. (2009). *Realism*, Routledge.

    Child, Peter. *Modernism*.London:Routledge.

2. Castle, Gregory. (2013). *The Literary Theory: Handbook*. UK: Wiley&sons,.

3. Day, Aidan. (2002). *Romanticism*. London : Routledge.

4. Abrams, M.H. (2000). *A Glossary of Literary Terms.* New Delhi : Pearson.

5. Cuddon, C.A. (2000). *The Penguin Dictionary of Literary Terms and Literary Theory* New Delhi, Penguin

6. Howthorn, Jeremy. (2000). *A Glossary of Contemporary Literary Theory* London Bloomsbury Academic.

7. Child, Peter, (1988). *Modernism : A Critical Idiom,* London Routledge.

Suggested e-resources:

- Romanticism

  https://plato.stanford.edu/entries/aesthetics-19th-romantic/

- German Idealism

  http://filozofia.unimiskolc.hu/Understanding_German_Idealism__ Understanding_Movements_in_Modern_Thought_.pdf

- Art and Aesthetics

  https://academic.oup.com/bjaesthetics/article-abstract/26/3/257/16729?redirectedFrom=PDF

Discipline Electives

ENGL 305 Modern Poetry

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, students will be able to:

- appreciate various poetic devices identified in the various texts of modern poetry;
- understand realism and other modes of poetic expression;
- critically analyze modern poetic texts and assimilate ideas of various movements of the milieu;
- synthesize humane values against the decadence;
- display their understanding of various poets of the era.

Course content:

Unit I   W.B. Yeats   :   Sailing to Byzantium, The Second Coming, Leda and the Swan, For his Own Epitaph, To a Friend whose Work has Come to Nothing, The Lake Isle of Innisfree, Long Legged Fly.

Unit II T.S. Eliot   :   The Love Song of J. Alfred Prufrock.

Unit III W. H. Auden   :   Lay Your sleeping Head, September 1,1939

Muse de Beaux Arts

Unit IV Philip Larkin   :   Church Going, Toads.

Unit V   Background Topics:

Modernism, Imagism, Cubism, Surrealism, Vorticism, Futurism, Symbolism, Art and Artist, Myth, Materialism, Capitalism, Anti-hero, Epicureanism or Hedonism, Subjectivity, Polyphony and Intertextuality.

Note: The background topics are to be taught and discussed in consonance with the texts, contexts and poets prescribed

Recommended Readings:

1. Abrams, M.H. (2000). *A Glossary of Literary Terms.* New Delhi: Pearson

2. Cuddon, C.A. (2000). *The Penguin Dictionary of Literary Terms and Literary Theory.* New Delhi: Penguin

3. Howthorn, Jeremy. (1992). *A Glossary of Contemporary Literary Theory.* London: Bloomsbury Academic

4. Child, Peter (1988). *Modernism: A Critical Idiom.* London: Routledge

5. A.E. Dyson & C. B. Cox (1963). *Modern Poetry: Studies in Practical Criticism.* London, E. Arnold.

Suggested e-resources:

•   Yeats, India and Hinduism
    http://shodhganga.inflibnet.ac.in/bitstream/10603/22155/9/09_chapter%203.pdf
•   W.B. Yeats
    http://egyankosh.ac.in/bitstream/123456789/22219/1/Unit-43.pdf
•   T.S. Eliot
    http://egyankosh.ac.in/bitstream/123456789/22636/1/Unit-2.pdf
•   Philip Larkin

ENGL 309 Science Fiction

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- know the major aspects of Science Fiction
- explore the relationship between literature and Science
- understand the complex nuances which connect literature and Science
- appreciate the socio-pragmatic realities of the world that science and literature represent

Course Content:

Unit I   Mary Shelley: *Frankenstein*

Unit II   George Orwell: *Nineteen Eighty Four*

Unit III Arthur Canon Doyle: *The Hound of Baskervilles*

Unit IV   Aldous Huxley : *The Brave New World*

Unit V   William Gibson : *Neuromancer*

Recommended Readings:

1   Shelley, Mary. (1888). *Frankenstein, Or The Modern. Promethus,*London: George Routledge and Sons.

2   Orwell, George. (2012). *Nineteen Eighty Four*. India : Om Books.

3   Huxley, Aldous. (1932) *Brave New World.* UK: Penguin Books

Suggested e-resources:

1.   Fantasy and Science Fiction

http://egyankosh.ac.in/bitstream/123456789/39401/1/Unit-4.pdf

2.   Science and fiction and future

https://www.jstor.org/stable/pdf/376232.pdf?refreqid=excelsior%3Adc745ccf2ea773932cbe10bd9e7193ef

3.   Study of Science fiction

http://shodhganga.inflibnet.ac.in/handle/10603/31639

ENGL 303 Modern Drama

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, students will be able to:

- appreciate drama as a genre of literature in general and modern English drama in particular;
- familiarize themselves with the techniques of modern drama and artefacts which constitute the effect on stage;
- acquaint themselves with different facets of modern drama and understand the socio-political and cultural background of the audience, the playwright, and also the texts;
- build up understanding to adjudicate the performance of such dramas and their effect on their value system.

Course Content:

Unit I   Mahesh Dattani   –   *Dance Like a Man* (non-detailed)

Unit II G.B Shaw   –   *Candida* (Non-detailed)

Unit III John Osborne   -   *Look Back in Anger (detailed)*

Unit IV Henrik Ibsen   -   *The Doll's House (detailed)*

Unit V   Background Topics:

Angry Young Man, Existentialism, Nihilism, The Great Depression, Kitchen-sink Drama

Note: Background topics are to be taught and discussed in consonance with the texts, contexts and authors prescribed

Recommended Readings:

1. William, Raymond (1969). *Drama from Ibsen to Brecht.* Harmondsworth : Penguin.

2. John, Russell Taylor (1989). *John Osborne : Look Back in Anger A Casebook*. London: Cambridge University Press.

3. Olson, R.G. (1999). *An Introduction to Existentialism.* New York: Dover Publication

Suggested e-resources:

- Modern Drama

  http://muse.jhu.edu/journal/302

- Look Back in Anger

  https://www.jstor.org/stable/25091738?Search=yes&resultItemClick

- The Doll's House

  file:///C:/Users/Administrator/Downloads/24311-Article%20Text-56264-1-10-20160830.pdf

ENGL 306 Autobiography

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, students will be able to:

- know the major aspects of autobiography
- explore the relationship between self and its representation
- understand the complex nuances growth and development of self in autobiography
- appreciate the socio-pragmatic realities of the world autobiography represents

Course Content:

Unit I   Annie Besant   :   *Autobiography*

Unit II   Sharankumar Limbale :   *The Outcaste* Translated by Santosh Bhoomkar

Unit III Benjamin Franklin   :   *Autobiography*

Unir IV Binodini Dasi   :   *My Story and Life as an Actress*

Unit V   **Background Topics:**

Self and Society, Role of Memory in writing Autobiography, Autobiography as Resistance, Autobiography as Rewriting History

Recommended Readings:

1. James, Olney (1972). *A Theory of autobiography' in Metaphors of Self : The Meaning of Autobiography* . (Princeton: Princeton University Press, pp.3-50

2. Laura, Marcus (1994). *The Law of Genre'in Autobiographical Discourses* (Manchester : Manchester University press , pp 22-72

3. Linda, Anderson (2001). *'Introduction' in Autobiography* (London: Routledge, pp.1-17.

Suggested e-resources:

- Autobiography:

  http://egyankosh.ac.in/bitstream/123456789/5301/1/MWG-008B1E-U1.pdf

- Principles of autobiography:

  https://www.jstor.org/stable/pdf/468400.pdf?refreqid=excelsior%3A60943e0aa7989e4a4dfba24e81243592

- Shifting Paradigms in Autobiography:

  http://egyankosh.ac.in/bitstream/123456789/40637/1/Unit-2.pdf

ENGL 310 Travel Writing

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- know the major aspects of cinema
- explore the relationship between literature and cinema
- understand the complex nuances which connect literature and cinema
- appreciate the socio-pragmatic realities of the world that cinema and literature represent.

Course Content:

Unit I	Al Biruni	:	Chapter LXIII,LXIV,LXV,LXVI in *India by Al Biruni* edited by Qeyamuddin Ahmad , National Book Trust of India.
Unit II	Mark Twain	:	*The Innocent Abroad* Chapter VII,VIII and IX) Wordsworth Classic Edition)
Unit III	William Dalrymple	:	*City of Dijnn* (Prologue, Chapters I and II) Penguin Books
Unit IV	Rahul Sankrityayan	:	From Volga to Ganga (Translatin by Victor Kierman) Pilgrims Publishing.

Unit V Background Topics

Travel writing and Ethnography, Gender and Travel, Globalization and Travel, Travel and Religion , Orientalism and Travel

Recommended Readings:

1. Susan Bassnett, 'Travel Writing and Gender', in Cambridge Companion to Travel Writing med Peter Hulme and Tim Young (Cambridge : CUP, 2002).

2. Tabish Khair, ' An Interview with William Dalyrmple and Pankaj Mishra' in Postcolonial Travel Writings : Critical Explorations, ed. Hustin D. Edwards and Rune Graulund (New York: Palgrave Macmillan , 2011).

3. Casey Balton, *Narrating Self and Other : A Historical View', in Travel Writing : The Self and The other* (Routledge , 2012).

4. Sachidananda Mohanty, 'Introduction : Beyond the Imperial Eyes' in travel Writing and Empire (New Delhi: Katha , 2004).

Suggested e-resources:

- Importance of Travel writings

  http://egyankosh.ac.in/handle/123456789/13660

- Travel Writings

  http://egyankosh.ac.in/handle/123456789/21539

- Travel writings and literature

  https://www.jstor.org/stable/pdf/40039867.pdf?refreqid=excelsior%3A64a1463180fdfc1ce298ddc705159c6d

Geography

First Semester

GEOG 103 Physical Geography

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: After the completion of the course, students will be able to:

- Describe origin of earth, continents and ocean basin, Isostasy, diastrophism, drainage pattern and several landforms.
- Describe the wind movements, pressure, composition and structure of the earth, jet streams.
- Classify world in terms of climate, air masses and fronts and describe cyclones and their types.
- Describe ocean bottom reliefs of Indian ocean, distribution of temperature and salinity, tides, currents and coral reefs.

Course Content:

Unit I Definition and Scope of Physical Geography; Origin of the Earth: - Gaseous Hypothesis of Kant, Nebular Hypothesis of Laplace, Tidal Hypothesis of James Jeans and Big Bang Theory; Interior of the Earth; Origin of the Continent and Oceans: - Wegner's Theory of Continental Drift and Plate Tectonic Theory; Theories of Mountain Building: - Geosyncline Orogen Theory of Kober and Plate Tectonic Theory.

Unit II Isostasy: - Concept and Views of Airy and Pratt; Diastrophism: - Faults & Folds; Weathering: - Physical, Chemical and Biological; Drainage pattern and Cycle of Erosion: - Davis & Penck; Landforms: - Fluvial, Coastal and Arid.

Unit III Composition and Structure of the Atmosphere; Atmospheric temperature: – Insolation and Heat Budget; Atmospheric pressure: - Vertical and Horizontal; Distribution of Air pressure; Winds: - Planetary, Periodic and Local winds; Jet stream:- Definition, Characteristics & its Significance.

Unit IV Air masses: - Source region and Classification of Air masses; Fronts: - Frontogenesis and Frontolysis, Type of Fronts; Cyclones: - Tropical and Temperate Cyclones; Anti Cyclones; Climatic Classification by Koppen.

Unit V Reliefs of the ocean basins – Bottom reliefs of the Indian Ocean; Distribution of Temperature and Salinity of Oceans; Ocean currents: - Atlantic Ocean and Pacific Ocean Currents; Tides: - Type and theory of Origin (Progressive wave and Stationary Wave theory); Coral reefs: - Conditions of growth, Types and Origin according to Darwin and Murray.

Stencils are to be permitted during the examination.

Recommended Books:

1. Barry, R. G. & Chorley, R. J. (1998). *Atmosphere: Weather and Climate* (7th ed.). London, UK: Routledge.

2. Das, P. K. (1968). *The Monsoons*. New Delhi, India: National Book Trust.

3. Dayal, P. (1996). *A Text book of Geomorphology*. (2nd ed.). Patna, India: Shukla Book Depot.

4. Garrison, T. (1998). *Oceanography*. (3rd ed.). California, CA: Wadsworth.

5. Gohchengleong (2011). *Certificate Physical and Human Geography*. New Delhi, India: Oxford University Press.

6. Khullar, D. R. (2016). *Physical Geography*. Ludhiana, India: Kalyani.

7. Siddartha, K. (2014). *The Earth's Dynamic surface: A textbook on Geomorphology*. New Delhi, India: Kisalya.

8. Singh, S. (2015). *Geomorphology*. Allahabad, India: Pravalika.

9. Smails, R. J. (1985). *The Study of Landforms*. New York, NY: McGraw Hill.

10. Strahler, A. N. & A. H. Strahler (2008). *Modern Physical Geography*. (4th ed.). New Jersey, NJ: John Wiley & Sons.

11. चौहान, वी. एस. (1996). *भौतिक भूगोल*. मेरठ, भारतः रस्तोगी.

12. शर्मा, एच. एस. (2014). *भौतिक भूगोल*. जयपुर, भारतः पंचशील.

13. सिंह, एस. (2005*). भौतिक भूगोल*. गोरखपुर, भारतः वसुन्धरा.

Suggested e-learning materials:

1. Interior of earth

   https://www.nationalgeographic.com/science/earth/surface-of-the-earth/earths-interior/

2. Plate Tectonics, Weathering, Mass Wasting and Erosion
http://hkss.cedd.gov.hk/hkss/eng/education/GS/eng/hkg/chapter4.htm

3. Geomorphic Processes
http://ncert.nic.in/ncerts/l/kegy206.pdf

GEOG 101L Fundamentals of Cartography Lab

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **0   0   4   2**

Learning Outcomes: After the completion of the course, students will be able to:

- Describe cartography and theoretical background of scales and their types.
- Draw plain, diagonal, comparative, time and Vernier scale.
- Enlarge, reduce and combine maps.
- Describe the uses of thermometer, barometer, hair hygrometer, rain gauze and wind vane.
- Conduct a plain table survey through radiation, intersection and traversing.

Course Content:

1) Meaning and Definition of Cartography.
2) Scale: - Plain, Diagonal, Comparative (Distances and Time), & Vernier (2 exercises of each scale).
3) Enlargement, Reduction & Combination of maps.
4) Weather Instruments: - Thermometer, Barometer, Hair hygrometer, Rain Gauge & Wind vane.
5) Plane Table Survey: - Methods of Plane Tabling; Radiation, Intersection and Traverse.

   Non Scientific calculators are allowed during the examination

Recommended Books:

1. Mishra, R. P. (2014*). Fundamentals of Cartography* (2nd ed.). New Delhi, India: Concept.
2. Robinson, A. R. (2011). *Elements of Cartography* (6th ed.). London, UK: Chapman & Hall.

3. Saha, P., & Basu, P. (2011). *Advanced Practical Geography* (7th ed.). Kolkatta, India: Books & Allied.

4. Singh, R. L. (2011). *Elements of Practical Geography* (8th ed.). New Delhi, India: Kalyani.

5. खुल्लर, डी. आर. (2015). *प्रयोगात्मक भूगोल.* लुधियाना, भारतः कल्याणी.

6. दयाल, पी. (2006). *प्रयोगात्मक भूगोल की रूपरेखा.* नई दिल्ली, भारतः राजेश.

7. शर्मा, जे. पी. (2011). *प्रायोगिक भूगोल* (पंचम् सं.). मेरठ, भारतः रस्तोगी.

8. सिंह, आर. एल. (2013). *प्रायोगिक भूगोल के सिद्धान्त* (तृतीय सं.). इलाहाबाद, भारतः शारदा पुस्तक भवन.

Suggested e-learning materials:

1. Introduction to Cartography
    http://www.sfu.ca/~hickin/Maps/Chapter%201.pdf

2. Scale
    http://earthsci.org/education/fieldsk/Map_Scales/geo_scales.html

3. Plane table surveying
    https://nptel.ac.in/courses/105107122/33

4. Methods of Plane table Surveying
     https://nptel.ac.in/courses/105107122/34

5. Weather Instruments
    http://sites.tufts.edu/stompactivitydatabase/files/formidable/Weather-Instruments.pdf

Second Semester

GEOG 102 Human Geography

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After the completion of the course, students will be able to:

•   Define human geography and relate it to the other social sciences; describe man environment relationships and schools of human geography.

- Describe evolution of man, classify human races and describe migration theories.
- Map and describe the distribution of several tribes- Pigmies, Badawins, Eskimos, Khirgiz, Gujjars, Bakarwals, Toda, Bhil and Santhal and their economic activities.
- Describe population distribution of the world with maps, concepts of population growth, population theories and human development.
- Classify cities functionally; describe urbanization, settlements and their types.

Course Content:

Unit I   Definition and Scope of Human Geography, its relation with other Social Sciences; Man – Environment relationship; Schools of Human Geography: Determinism, Possibilism and Neo – determinism; Fundamental principles of Human Geography: Principle of Activity, Principle of Areal Differentiation, Principle of Terrestrial Unity.

Unit II   Evolution of Man: Monogenetic Theory, Multi Origin Theory and Modern Theory; Criteria of classification of Human Races; Classification and Distribution of Human Races according to G. Taylor; Factors of evolution of Human Races; Migration Zone Theory by G. Taylor

Unit III Distribution of Tribes in the Equatorial and Desert Region: Habitat, economic activities and Social organization of Pigmies and Badawins; Distribution of Tribes in the Grasslands and Tundra Region: Habitat, Economic activities and Social organization of Eskimos and Khirgiz; Distribution of Tribes in North and South India: Habitat, Economic activities and Social organization of Gujjars & Bakarwals and Toda; Distribution of Tribes in East and West India: Habitat, Economic activities and Social organization of Santhal and Bhil; Early economic activities of mankind: - Food gathering, Hunting & Shifting cultivation.

Unit IV Distribution of population: World distribution pattern Physical, Economic and Social factors influencing spatial distribution; Concept of Over population, Under population, Optimum population and Zero population growth; Demographic Transition Theory; Migration: Forms, Causes and Types; General laws of migration- E.G. Ravenstein's laws, Lee's model, Zelinskey's

mobility transition model; Concept of Human Development, Population problems and Policy of India.

Unit V Settlement: Origin and Types of settlement; Rural settlement- Pattern of rural settlements, House types and Building materials, Rural settlement in India; Urban settlement- Origin of towns, Patterns of cities; Functional classification of cities, Zoning of cities; Urbanization and Problems: with special reference to slums.

Stencils are to be permitted during the examination

Recommended Books:

1. Huntington, E. (1959). *The Principles of Human Geography* (2nd ed.). New York, NY: John Wiley & Sons.

2. Husain, M. (2014). *Human Geography* (4th ed.). Jaipur, India: Rawat.

3. Leong, G. C. & Morgan, G. C. (2010). *Human and Economic Geography* (2nd ed.). Oxford, UK: O.U.P.

4. Maurya, S. D. (2015). *Human Geography*. Allahabad, India: Pravalika.

5. Negi, B. S. (1982). *Human Geography- An Ecological Aproach*. Meerut, India: Kedarnath Ramnath.

6. Rubenstein, J. M. (2003). *An Introduction to Human Geography* (7[th]ed.). New Jersey, NJ: Prentice Hall.

7. Singh, L. R. (2005). *Fundamentals of Human Geography* (2[nd]ed.). Allahabad, India: Sharda Pustak Bhawan.

8. Verma, J.K. (2008). *Human Geography*. New Dehli, India: GNOSIS.

9. कौशिक, एस. डी. (2011). *मानव भूगोल के सरल सिद्धांत* (12 वाँ सं.). मेरठ, भारत: रस्तोगी.

10. गर्जुर, आर., एवं जाट, बी. सी. (2006). *मानव भूगोल.* जयपुर, भारत: पंचशील.

11. मौर्या, एस. डी. (2009). *मानव भूगोल* (तृतीय सं.). इलाहाबाद, भारत: शारदा पुस्तक भवन.

12. सिंह, के., एवं सिंह, जे. (2009). *मानव भूगोल.* नई दिल्ली, भारत: राधा.

13. सिंह, के. (2010). *मानव भूगोल.* जयपुर, भारत: इशिका.

14. हुसैन, एम. (2012). *मानव भूगोल* (चतुर्थ सं.). जयपुर, भारत: रावत.

Suggested e-learning materials:

1. Schools of Human Geography: Determinism, Possibilism and Neo – determinism

   http://ncert.nic.in/ncerts/l/legy101.pdf

2. factor of Evolution human race and criteria

   http://egyankosh.ac.in/bitstream/123456789/41420/1/Unit-4.pdf

3. Migration Zone theory by Griffith Taylor
   https://booksite.elsevier.com/brochures/hugy/SampleContent/Mapping-Race-and-Ethnicity.pdf

4. Bushmen Tribe

   http://www.newworldencyclopedia.org/entry/Bushmen

GEOG 104L Statistical Techniques and Data Representation Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes:

After the completion of this course, students should be able to:

- Describe statistical sampling and represent frequency distribution in several forms.

- Represent statistical data through diagrams- multiple bar diagram, simple pyramid diagram, rectangular diagram, wheel or pie diagram, and spherical diagram.

- Measure mean, median mode & standard deviation.

- Represent Statistical data through graphs-poly linear graph, climograph and triangular graph.

Course Content:

1. Meaning and definition of statistics, data and sampling.
2. Statistical series and their types.
3. Frequency distribution and its presentation.

4. Measures of Central tendency : Arithmetic Mean Mode & Median. (Direct Method)

5. Measure of Dispersion: Standard Deviation.

6. Representation of statistical data through diagrams :- Multiple Bar diagram, Simple Pyramid diagram, Rectangular diagram (Simple and Divided), Wheel or pie diagram, Spherical diagram

7. Representation of statistical data through graphs: - Poly Linear graph, Climograph, Triangular graph.

   Scientific calculators are allowed during the examination.

Recommended Books:

1. Alvi, Z. (2005). *Statistical Geography Methods and Applications* (2nd ed.). New Delhi, India: Rawat.

2. Dadson, S. J. (2017). *Statistical Analysis of Geographical Data an Introduction.* Oxford, UK: John Wiley & Sons.

3. Gupta, S. P. (2012). *Statistical methods* (4th ed.). New Delhi, India: Sultan Chand and Sons.

4. Mahmood, A. (2017). *Statistical Methods in Geographical Studies* (6th ed.). New Delhi, India: Rajesh.

5. Saha, P. & Basu, P. (2011). *Advanced Practical Geography* (7th ed.). Kolkatta, India: Books & Allied.

6. Singh, R. L. (2011). *Elements of Practical Geography* (8th ed.). New Delhi, India: Kalyani.

7. खुल्लर, डी. आर. (2015). *प्रयोगात्मक भूगोल.* लुधियाना, भारतः कल्याणी.

8. नागर, के. एन. (2013). *सांख्यिकीय के मूलतत्व* (चतुर्थ सं.). मेरठ, भारतः मीनाक्षी.

9. शर्मा, जे. पी. (2011). *प्रायोगिक भूगोल* (पंचम् सं.). मेरठ, भारतः रस्तोगी.

Suggested e-learning materials:

1. Sampling
   https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P01,M-12

2. Frequency distribution
   https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P01,M-12

3. Histogram

   https://www.liverpool.ac.uk/~cll/lskills/WN/NumeracyDiagrms.html#histo

4. Measures of central tendency

   https://www.mathsisfun.com/data/central-measures.html

5. Standard deviation method

   https://www.learner.org/courses/againstallodds/pdfs/AgainstAllOdds_StudentGuide_Unit06.pdf

6. Diagrams

   http://egyankosh.ac.in/bitstream/123456789/20422/1/Unit-14.pdf

Third Semester

GEOG 202 Introduction to Geography of India

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: After the completion of the course, students will be able to:

- Describe and map the location of India, its physiographic divisions.
- Describe the drainage, climate, soil and vegetation their types and distribution.
- Describe major crops, minerals, industrial regions, population of India and their distribution.
- Demarcate Rajasthan in terms of physiography, describe climate, drainage, vegetation, soils and their distribution.
- Describe agriculture, livestock, irrigation, human resources and tourism.

Course Content:

Unit I   Introduction :- Location; Neighbouring countries; Frontiers; India :- A land of Diversities ; Unity within Diversities; Physiographic Division- Himalayan Region, The Great Plains of India, Peninsular Plateau, Coastal Plains and Islands.

Unit II Drainage systems of India; Climate: - Summer and Winter Season; Monsoon: - Mechanism of Monsoon; Soil - Type,

Distribution & Characteristics; Vegetation: - Type and their Distribution.

Unit III Agriculture: - Major Crops and their Distribution (Wheat, Rice & Tea); Minerals: - Distribution and Production of Iron ore & Coal; Industrial Regions of India and their Problems; Transport & Trade: - Ports and Foreign Trade; Population: - Distribution & Density of Population, Sex Composition & Literacy Rate.

Unit IV Physiographic Division of Rajasthan; Climate:- Major seasons; Drainage Systems; Natural Vegetation:- Type, Distribution & their importance; Soils of Rajasthan.

Unit V Agriculture:- Type and Distribution of Major Crops in Rajasthan (Bajra & Mustard) ; Livestock :- Sheep & Camel; Irrigation :- Indira Gandhi Canal Project; Human Resources of Rajasthan: - Distribution & Density, Sex ratio, SC/ ST; Tourism in Rajasthan : Major Tourist Spots & its importance in the Economy of Rajasthan.

Stencils are to be permitted during the examination

Recommended Books:

1. Bhalla, L. R. (2016). *Geography of Rajasthan* (12[th]ed.). Jaipur, India: Kuldeep.

2. Khullar, D. R. (2014). *India, A Comprehensive Geography* (3rd ed.).Ludhiyana, India: Kalyani.

3. Mishra, V. C. (1967). *Geography of Rajasthan*. New Delhi, India: National Book Trust.

4. Singh, G. (2010). *Geography of India* (9th ed.). Delhi, India: Atma Ram.

5. बंसल, एस. सी. (2015). *भारत का भूगोल* (तृतीय सं.). मेरठ, भारत: मीनाक्षी.

6. मामोरिया, सी. (2018). *भारत का वृहत भूगोल.* आगरा, भारत: साहित्य भवन.

7. शर्मा, एच. एस., एवं शर्मा, एम. एल. (2017). *राजस्थान का भूगोल* (13वाँ सं.). जयपुर, भारत: पंचशील.

8. शर्मा, एच. एस., एवं शर्मा, एम. एल. (2017). *भारत का नूतन भूगोल.* जयपुर, भारत: आर. बी. डी.

9. शर्मा, आर. (2014). *राजस्थान का वृहत भूगोल* (द्वितीय सं.). उदयपुर, भारत: हिमाशुं.

10. सक्सैना, एच. (2014). *राजस्थान का भूगोल* (12वाँ सं.). जयपुर, भारत: राजस्थान हिन्दी ग्रंथ अकादमी.

11. सक्सैना, एच. एम., सक्सैना, आर. एवं सक्सैना, पी. (2017). *भारत का भूगोल.* जयपुर, भारत: रावत.

12. सिंह, जी. (2006). *भारत का भूगोल.* दिल्ली, भारत: आत्माराम.

13. हुसैन, एम. (2018). *भारत का भूगोल* (सप्तम् सं.). नई दिल्ली, भारत: टाटा मैक्ग्राहिल.

Suggested e-learning materials:

1. Monsoon
   https://www.britannica.com/science/Indian-monsoon
2. Drainage system of India
   https://iasscore.in/pdf/samplenotes/4.%20Drainage.pdf
3. Indira Gandhi canal
   https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/57cff6e816b5
   1c038dedd394
4. Human Resources of Rajasthan
   http://worldpopulationreview.com/countries/india-
   population/

GEOG 203L Mapping and Prismatic Compass Survey Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: After the completion of the course, students will be able to:

- Create distribution maps through chorochromatic, simple shading, choro-schematic methods.
- Create maps of isobars, isotherms and dot method.
- Conduct prismatic compass survey through radiation and intersection method.
- Correct closing error through Bowditch rule.

Course Content:

1. Distribution Map: - General Rules and Methods of drawing map.
2. Qualitative Methods :- Chorochromatic Method, Simple Shading Method, Naming Method, Choroschematic Method- Geometrical Symbol, pictorial Symbol and Literal Symbol Method.
3. Quantitative Method:- Choropleth, Isopleth – Isobars and Isotherms, Dot Method
4. Prismatic Compass Survey:- Instruments required for Prismatic Compass Survey.
5. Prismatic Compass Survey:- Radiation Method, Intersection Method.
6. Traverse Method
7. Correction of closing Error with Bowditch Rule.

   Non-Scientific calculators are allowed during the examination

Recommended Books:

1. Mishra, R. P. & Ramesh, A. (2014). *Fundamentals of Cartography* (2nded.). New Delhi, India: Concept.
2. Raize, E. (1948). *General Cartography*. London, UK: McGraw Hill.
3. Sarkar, A. (2015). *Practical Geography*: *A Systematic Approch* (3rded.). Kolkatta, India: Orient Black Swan.
4. Singh, R. N. & Kanaujia, L. R. S. (1998). *Map Work & Practical Geography.* Allahabad, India: Central Book Depot.
5. खुल्लर, डी. आर. (2015). *प्रयोगात्मक भूगोल.* लुधियाना, भारत: कल्याणी.
6. दयाल, पी. (2006).*प्रयोगात्मक भूगोल की रूपरेखा.* नई दिल्ली, भारत: राजेश.

7. शर्मा, जे. पी. (2011). *प्रायोगिक भूगोल* (पंचम् सं.). मेरठ, भारत: रस्तोगी.

Suggested e-Learning Materials:

1. Distribution Maps

   http://ncert.nic.in/ncerts/l/legy303.pdf

2. Prismatic Compass Survey

   https://www.svce.ac.in/departments/cve/downloads/Surveying%20I/Unit%202.pdf

Fourth Semester
GEOG 201 Economic Geography

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After the completion of the course, students will be able to:

- Define economic geography, describe its scope and relate it with other social sciences
- Classify resources and describe soil mineral and energy resources
- Describe spatial distribution, production and trade of rice, wheat, cotton, tea and Classify world into agricultural regions
- Describe several industries, their location determinants, and distribution of iron- steel and cotton-textile industry.
- Describe trade, transport, their controlling factors, major law making bodies of the world and major transport routes.

Course Content:

Unit I Definition and Scope of Economic Geography; Development of Economic Geography. Its relation with other Subjects; Concept of the Economy; Economic Activities: Primary, Secondary and Tertiary; Impact of Economic Activities on the Environment.

Unit II Natural Resources: Meaning and Classification of Resources; Conservation of Resources: Water & Forest; Soil Resources: Composition of Soil, Factors affecting soil formation; Soil profile, Soil classification (NRCS); Mineral Resource: Type, Distribution & Production of Iron Ore; Energy Resources: Types, Distribution and Production of Coal and Petroleum.

Unit III Agriculture: Physical and Socio– Cultural environment influencing crop production; Spatial Distribution, Production and International trade of Rice & Wheat; Spatial Distribution, Production and International trade of Cotton; Spatial Distribution, Production and International trade of Tea; Agricultural Classification: Whittlesey's Classification.

Unit IV Manufacturing Industry: Meaning & Types; Determinants of location of industry; Industrial Location Theory: A. Weber; Distribution & production of Iron & Steel industry; Distribution & Production of Cotton Textile iIndustry.

Unit V Trade: Type of trade, Factors affecting International trade; Evolution of International trade, Barriers of International trade, Agencies: GATT, WTO, EUROPEAN UNION; Transport: Importance & Development of transport; Means of transport; Water Transport: Suez Canal, Panama Canal, North Atlantic Route.

Stencils are to be permitted during the examination.

Recommended Books:

1. Guha, J. L. & Chattoraj, P. R. (2009). *Economic geography – A Study of Resources* (9th ed.). Kolkata, India: The World Press.

2. Gurjar, R. & Jat, B. C. (2010). *Resources and Environment* (7th ed.). Jaipur, India: Panchsheel.

3. Hodder, B. W. & Lee, R. (2008). *Economic Geography* (Indian Reprint). Jaipur, India: Rawat.

4. Leong, G. C. & Morgan, G. C. (1982). *Human and Economic Geography* (2nd ed.). New York. NY: Oxford Press.

5. Maurya, S. D. (2018). *Economic Geography*. Allahabad, India: Pravalika.

6. Shelar, S. K. (2013). *Priciples of Economic Geography*. Kanpur, India: Chandralok.

7. Siddhartha, K. (2006). *Economic Geography Theories, Processes and Patterns* (2nd ed.). Delhi, India: Kisalaya.

8. Siddhartha, K. (2016). *Economic Geography* (3rd ed.). Delhi, India: Kitab Mahal.

9. गौतम, ए. (2015). *आर्थिक भूगोल के मूल तत्त्व*. इलाहाबाद, भारतः शारदा पुस्तक भवन.

10. जाट, बी. सी. (2016). *आर्थिक भूगोल* (चतुर्थ सं.). जयपुर, भारतः पंचशील.

11. मामोरिया, सी. (2012). *आर्थिक भूगोल* (द्वितीय सं.). आगरा, भारतः साहित्य भवन.

12. राव. एस. (2013). *आर्थिक भूगोल*. गोरखपुर, भारतः वसुन्धरा.

13. सिंह, के. एन. एवं सिंह, जे. (2010). *आर्थिक भूगोल के मूलतत्व* (11वाँ सं.). गोरखपुर, भारतः ज्ञानोदय.

14. सिंह, जे. (2009). *संसाधन भूगोल*. नई दिल्ली, भारतः राधा.

Suggested e-learning materials:

1. Suez Canal trade route

   https://www.britannica.com/topic/Suez-Canal

2. Panama Canal

   https://www.pancanal.com/eng/op/routes.html

GEOG 204L Relief Representation and Topographical Maps Lab

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After the completion of the course, students will be able to:

- Interpret topographical maps.
- Represent topographical features with the help of contours.
- Identify Human and natural phenomenon.
- Create Profiles using Contours in the topographical sheets.

Course Content:

1. Methods of Relief Representation : Hachures, Contours, Layer tint, BM, Spot heights

2. Representation of Relief Features : Water fall, Ridge, Gorge, Pass, Hanging valley along with U-shaped valley, Sand dunes, Cirque, Dolines

3. Profiles: Serial, Superimposed, Projected & Composite.

4. Conventional Signs & Symbols on Toposheets/Open Series Map (OSM).

5. Interpretation of Toposheets/Open Series Map (OSM).

Recommended Books:

1. Mishra, R. P. & Ramesh, A. (2014). *Fundamentals of Cartography* (2nded.). New Delhi, India: Concept.

2. Raize, E. (1948). *General Cartography*. London, UK: McGraw Hill.

3. Singh, G. (2009). *Map work and Practical Geography* (4[th]ed.). Delhi, India: Vikas.

4. खुल्लर, डी. आर. (2015). *प्रयोगात्मक भूगोल*. लुधियाना, भारत: कल्याणी.

5. शर्मा, जे. पी. (2011). *प्रायोगिक भूगोल* (पंचम् सं.). मेरठ, भारत: रस्तोगी.

Suggested e-learning materials:
1. Method of relief representation
   http://www.sfu.ca/~hickin/Maps/Chapter%204.pdf
2. Representation of relief features
   http://ncert.nic.in/ncerts/l/kegy305.pdf

Fifth Semester

GEOG 303L Map Projection Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: After the completion of the course, students will be able to:
- Elucidate necessity & classification of map projections.
- Compare different kind of map projections.
- Construct map projections graphically.
- Suggest projection for any area of earth surface.

Course Content:
1. Map Projection: Definition and History of Map Projection.
2. Necessity & Classification of Map Projection.
3. Graphical Construction of Map Projection.
4. Zenithal Projection: Polar zenithal equidistant projection, Polar zenithal equal area, Gnomonic polar zenithal projection, Orthographic polar zenithal projection.
5. Conical Projection: Simple conical projection with one and two standard parallel. Bonne's projection & Polyconic projection.
6. Cylindrical Projection: Perspective cylindrical projection, Cylindrical equal area projection, Mercator's projection.
7. Conventional Projection: Molleweide's projection & Globular projection.

Non Scientific calculators are allowed during the examination

Recommended Books:

1. Saha, P. & Basu, P. (2011). *Advanced Practical Geography* (7[th]ed.). Kolkatta, India: Books & Allied.

2. Singh, G. (2009). *Map work and Practical Geography* (4[th]ed.). Delhi, India: Vikas.

3. खुल्लर, डी. आर. (2015). *प्रयोगात्मक भूगोल.* लुधियाना, भारत: कल्याणी.

4. शर्मा, जे. पी. (2011).*प्रायोगिक भूगोल* (पंचम् सं.). मेरठ, भारत: रस्तोगी.

5. सिंह, आर. एल. (2013). *प्रायोगिक भूगोल के सिद्धान्त* (तृतीय सं.). इलाहाबाद, भारतः शारदा पुस्तक भवन.

Suggested e-learning materials:

1. Types of map projection
   https://www.gistda.or.th/main/en/node/950

2. Meaning and elements of map projection, construction of conical and cylindrical projection
   http://ncert.nic.in/textbook/pdf/kegy304.pdf

Sixth Semester

GEOG 301L Fundamentals of Geoinformatics Lab

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After the completion of the course, students will be able to:

- Explain development and types of aerial photographs.
- Identify and interpret aerial photographs.
- Elucidate different elements and development of remote sensing.
- Describe different kinds of remote sensing platforms and discuss important elements of GIS.

Course Content:

1. Aerial photographs: Introduction & Development of Aerial photographs.
2. Methods and Types of Aerial photographs.
3. Identification of Aerial photographs.
4. Stereovision, Interpretation of Aerial photographs.
5. Remote Sensing: Meaning, Process & Elements of Remote Sensing.
6. Development of Remote Sensing.
7. Advantages of Remote Sensing.
8. Remote Sensing Platforms.
9. Satellite programmes of Remote Sensing of India.
10. GIS: Definition, Scope & Elements of GIS.

Non Scientific calculators are allowed in the examination.

Recommended Books:

1. American Society of Photogrammetry. (1993). *Manual of Remote Sensing (2ⁿᵈed.)*. Virginia, VA: ASP, Falls Church.
2. Fazal, S. (2008). *Remote Sensing Basics*. New Delhi, India: Kalyani.
3. Hammond, R. & McCullagh, P. (1978). *Quantitative Techniques in Geography: An Introduction (2ⁿᵈed.)*. Oxford, UK : Clarendon Press.
4. Nag, P. & Kudrat, M. (1998). *Digital Remote Sensing*. New Delhi, India: Concept.
5. Singh, R. L. (2011). *Elements of Practical Geography* (8ᵗʰed.). New Delhi, India: Kalyani.
6. चौनियाल, डी. डी. (2010). *सुदूर संवेदन एवं भौगोलिक सूचना प्रणाली.* इलाहाबाद, भारत: शारदा पुस्तक भवन.
7. शर्मा, जे. पी. (2011). *प्रायोगिक भूगोल (पंचम् सं.).* मेरठ, भारत: रस्तोगी.

Suggested e-learning materials:

1. History, type and application of aerial photography
   https://www.environmentalscience.org/principles-applications-aerial-photography

2. Remote Sensing platform and GIS
   http://ags.geography.du.ac.in/Study%20Materials_files/Punyatoya
   %20Patra_AM.pdf

3. Principles of Aerial Photography

   http://www.sfu.ca/~hickin/Maps/Chapter%208.pdf

4. Interpretation of Aerial Photographs

   https://www.nrem.iastate.edu/class/assets/nrem345/Week6_ALL.pdf

Discipline Electives

GEOG 305 Environment and Disaster Management

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: After the completion of the course, students will be able to:

- Understand about the ecosystem and their functions.

- Describe disaster, its types and issues generated during different cycles of disasters.

- Describe the policies of disaster management in India.

- Assimilate role of different bodies established for the cause of disaster relief.

Unit I Ecosystem: Types, Structure and Functions, Energy Flow; Food Chains, Food Web, Ecological Succession.

Unit II Introduction, Characteristic Features, Structure and Functions of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem, Aquatic Ecosystem. (Ponds, Lakes, Streams)

Unit III Disaster and Types: Earthquake, Cyclone, Floods, Volcanoes, Tsunami, Famine, Draught, Epidemics.

Unit IV Scenario of Disaster Management in India; India's Vulnerability Profile; Disaster Management Act. 2009 and Policy Guidelines, Case studies: Bhuj Earthquake 2001, The Indian Ocean Tsunami 2004. Kashmir Floods 2014.

Unit V National Institute of Disaster Management; National Disaster Response Force (NDRF); National Disaster Management

Authority; State Disaster Management Authority; District Disaster management Authority.

Recommended Books:

1. Bolt, B. A. (1988). *Earthquakes*. New York, NY: WH Freeman & Company.

2. Decker, R. W. & Decker, B. B. (2005). *Volcanoes* (4thed.). New York, NY: WH Freeman & Company.

3. Dowrick, D. (2003). *Earthquake Risk Reduction Zone*. England, UK: John Wiley & Sons.

4. Gere, J. M. & Shah, H. C. (1984). *Terra Non Firme Understanding and Preparing for Earthquakes*. New York, NY: WH Freeman & Company.

5. IGNOU (2005). *Understanding Natural Disasters*. E GyanKosh, Noida, India: Shagun Offset Press.

6. Keller, E. A. & Devecchio, E. D. (2015). Natural Hazards (4thed.). New York, NY: Pearson.

7. Keller, E.A. (1978). *Environmental Geology* (9thed.). North Carolina, NC: Bell & Howell.

8. Montgomery, C.W. (2013). *Environmental Geology* (10thed.). Texas, TX: McGraw Hill.

9. Prakash, I. (1994). *Disaster Management*. Ghaziabad, India: Rastriya Prahari.

10. Sharma, V. K. (1995). *Disaster Management*. New Delhi, India: Indian Institute of Public Administration (*IIPA*).

11. Singh, S. (2015). *Environmental Geography*. Allahabad, India: Pravalika

Suggested e-learning materials:

1. Disaster management policy 2009

   https://ndma.gov.in/images/guidelines/national-dm-policy2009.pdf

2. Policies of Disaster Preparedness

   https://www.ifrc.org/Global/Governance/Policies/disaster-policy-en.pdf

GEOG 302 Geographical Thought

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: After the completion of the course, students will be able to:

- Explain evolution of geographical thought and relationship of Geography with other branches of knowledge.

- Describe different tools and techniques of geographical study.

- Compare ancient, medieval and modern scholar's contributions in Geography.

- Elucidate important concepts of Geography as well as recent trends and current issues of subject.

Course Content:

Unit I Definition and Aims of Geography, Branches of Geography. Relationship of Geography with other Sciences, Tools and Techniques in Geography; Evolution of Geographical Thoughts.

Unit II Beginning of Classical Geography: Contribution of Greeks (Herodotus & Eratosthenes); Contribution of Romans. (Strabo & Ptolemy) Early Medieval Geography: Contribution of Arab Geographers (Al – Burini & Ibn-Battuta); Renaissance : Marco polo, Varenius and E. Kant; Main Aspects of Geography in Ancient India.

Unit III Contribution of German Schools of Geography: Humboldt & Carl Ritter; Contribution of French School of Geography: Vidal –De-La Blache & Jean Brunhes; Contribution of British School of Geography: Halford J. Mackinder; Contribution of American School of Geography: E. Huntington & Carl O. Sauer; Contribution of Soviet School of Geography : Peter Kropotkin

Unit IV Man –Environment Relations: Determinism, Possibilism and Neo-Determinism; Dichotomies in Geography: Physical Vs Human Geography, Systematic vs Regional Geography; Positivism and Quantitative revolution; Behaviouralism in Geography; Radicalism: Origin, Salient features & Objectives of Radical Geography.

Unit V Concept of Areal differentiation, Concept of Region and Types of Region; Concept of Cultural Landscape: Meaning & Elements of Cultural Landscape; Recent trends of Modern Geography: Six Trends by Freeman; Applied Geography: Meaning and Methods of Applied Geography; Need of Applied Geography in India.

Stencils are to be permitted during the examination.

Recommended Books:

1. Daniels, P., Bradshaw, M., Shaw, D. & Sidaway, J. (2008). *An Introduction to Human Geography: Issues for the 21st Century* (3[rd]ed.). London, UK: Prentice Hall.

2. Dikshit, R. D. (2018). *A Contextual History of Ideas* (2[nd]ed.). New Delhi, India: PHI.

3. Hussain, M. (2014). *Evolution of Geographical thought* (6[th]ed.). New Delhi, India: Rawat .

4. Kaushik, S. D. & Rawat, D. S. (2017). *Geographical Thought and Methodology.* Meerut, India: Rastogi.

5. Martin, G. (2007). *All Possible Worlds. A History of Geographical Ideas* (4[th]ed.). New York, NY: Oxford University Press.

6. Maurya, S. D. (2013). *History of Geographical Thought.* Allahabad, India: Sharda Pustak Bhawan.

7. Rana, L. (2008). *Geographical thought a systematic record of evolution*. New Delhi, India: Concept.

8. Singh, M. (2016). *Geographical Thought*. New Delhi, India: Sonali.

9. कौशिक, एस. डी. एवं रावत, डी. एस. (2017). *भौगोलिक विचारधारा एवं विधि तंत्र* (नवम् सं.). मेरठ, भारत, रस्तोगी.

10. जैन, एस. एम. (2018). *भौगोलिक चिन्तन का विकास* (संशोधित सं.). आगरा, भारतः साहित्य भवन.

11. प्रसाद, जी. (2006). *भौगोलिक संकल्पनाएँ.* नई दिल्ली, भारतः डिसकवरी.

12. मौर्य, एस. डी. (2015). *भौगोलिक चिन्तन का इतिहास.* इलाहाबाद, भारतः प्रयाग पुस्तक भवन.

13. सिंह, जे. (2009). *भौगोलिक चिन्तन के मूल आधार.* नई दिल्ली, भारतः वसुन्धरा.

14. हुसैन, एम. (2006). *भौगोलिक चिन्तन का इतिहास.* जयपुर, भारतः रावत.

Suggested e-Learning Materials:

1. Man-Environment relations

    https://epgp.inflibnet.ac.in/ahl.php?csrno=17   P-06,M-12

2. Concept of Region

    https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P-06, M-20

3. Behaviouralism in Geography

    https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P-06, M-27

4. Radicalism

    https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P-06,M-29

5. Applied Geography

    https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P-06,M-34

GEOG 306 Settlement Geography

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After the completion of the course, students will be able to:

- Develop an approach to study settlements.
- Depict the evolution of settlements and relate it to the geographical factors.
- Describe rural and urban morphology, its meaning and types.

- Classify cities functionally into different zones.

Course Content:

Unit I Settlement Geography: Meaning, Scope, Development and Approaches; Relation of Settlement Geography with Social Sciences; Concepts of Settlement Geography, Importance of Settlement study in Geography, Techniques and Tools of Settlement Geography.

Unit II Settlement: Meaning and Definition, Factors Affecting Origin and Evolution of Settlements, Sources related to the Origin and Growth of Settlements, Bases, Types and Classification of Settlements.

Unit III Types of Rural Settlements: Compact, Semi-compact, Hamlet and Dispersed; Types of Rural Settlements in India; Rural Morphology: Definition, Factors affecting, Stages of Development and Types – Physical, Functional and Social.

Unit IV Concept of Town and Urban Area: Difference between Rural and Urban Settlements, Definition of a Town; Factors affecting Origin and Evolution of Towns and Cities, Stages of Evolution of Cities According to G. Taylor; Urban Morphology: Definition, Factors Affecting, Stages of Development and their Types.

Unit V Theories of Urban Morphology: Concentric Zone Theory of Burgess, Sector Theory of Hoyt and Multiple Nuclei Theory of Harris & Ullman; Urban Land use and their Types; Functional Classification of Cities according to C. D. Harris; Central Place Theory of Walter Christaller; Concept of Conurbation and Umland.

Stencils are to be permitted during the examination

Recommended Books:

1. Bansal, S. C. (2015). *Urban Geography* (2nd ed.). Meerut, India: Meenakshi.

2. Daniel, P. (2002). *Geography of Settlement.* Jaipur, India: Rawat.

3. Ghosh, S. (1999). *Geography of Settlements*. Kolkata, India: Orient Longman.

4. Hussain, M. (2003). *Urban Geography*. New Delhi, India: Anmol.

5. Mandal, R. B. (2000). *Urban Geography* (2nd ed.). New Delhi, India: Concept.

6. Singh, R. Y. (2014). *Geography of Settlements* (2nd ed.). Jaipur, India: Rawat.

7. तिवारी, आर. सी. (2016). *अधिवास भूगोल* (अष्ट सं.). इलाहबाद, भारतः प्रयाग पुस्तक भवन.

8. बंसल, एस. सी. (2016). *ग्रामीण बस्ती भूगोल* (संशोधित सं.). मेरठ, भारतः मीनाक्षी.

9. मौर्य, एस. डी. (2017). *अधिवास भूगोल* (षष्ठ सं.). इलाहबाद, भारतः शारदा पुस्तक भवन.

10. सिंह, आई. (2008). *अधिवास भूगोल.* नई दिल्ली, भारतः यूनिवर्सिटी.

11. सिंह, आर. वाई. (2005). *अधिवास भूगोल.* नई दिल्ली, भारतः रावत.

Suggested e-learning materials:

1. Settlement patterns
   https://www.britannica.com/place/India/Caste#ref487283

2. Rural settlement
   https://www.jstor.org/stable/150101?seq=1#metadata_info_tab_contents

3. Origin and evolution of towns
   http://www4.brandonu.ca/ebertsd/281/281f17unit02.pdf

GEOG 304 World Regional Geography

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After the completion of the course, students will be able to:

- Elucidate physical aspects of Asia, Europe, Africa, North & South America and Oceania.
- Describe cultural aspects of Asia, Europe, Africa, North & South America and Oceania.
- Compare different continents of world.

- Illustrate terrain, drainage, climate, natural vegetation and Industrial regions of studied continents.

Course Content:

Unit I Asia -Geographical Location and Extension, Unity in Diversity in Asia, Terrain and Drainage, Spatial Distribution of Population, Climate, Natural Vegetation & Soil, Industrial Regions of Japan and China.

Unit II Europe-Location, Extension and Geographical Characteristics, Terrain & Drainage, Climate, Natural Vegetation & Soil, Spatial Distribution of Population, Industrial Regions of Britain.

Unit III Africa-Location and Extension, Terrain & Drainage, Climate, Natural Vegetation & Soil, Spatial Distribution of Population, Industrial Regions of Africa.

Unit IV North & South America-Location, Extension and Geographical Characteristics, Terrain & Drainage, Climate, Natural Vegetation & Soil, Spatial Distribution of Population, Industrial Regions of U.S.A.

Unit V Oceania (Australia and New Zealand)-Location, Extension and Geographical Characteristics, Terrain & Drainage, Climate, Natural Vegetation & Soil, Spatial Distribution of Population, Industrial Regions of Australia.

Stencils are to be permitted during the examination.

Recommended Books:

1. Cole, J. (1996). *A Geography of the World's Major Regions*. London, UK: Routledge.

2. Cole, M. M. (1961). *South Africa*. New York, NY: Dutton.

3. Gourou, R. (1980). *The Tropical World* (5th ed.). London, UK: Longman.

4. Hussain, M. (2012). *World Geography* (4thed.). Jaipur, India: Rawat.

5. Kolb, A. (1977). *Geography of a Cultural Region*. London, UK: Methuen.

6. Manku, D. S. (2017). *A Regional Geography of the World* (6th ed.). Ludhiana, India: Kalyani.

7. Minshull, G. N. (1984). *Western Europe*. New York, NY: Hoddard & Stoughton.

8. Songquiao, Z. (1994). *Geography of China.* New York, NY: John Wiley & Sons.

9. Ward, R. W. & Miller, A. (1989). *World Regional Geography: A Question of Place.* New York, NY: John Wiley & Sons.

10. अग्रवाल, एस. (2011). *विश्व का भूगोल.* जयपुर, भारतः इशिका.

11. राव, बी. पी., एवं सत्यपति, डी.पी. (2010). *एशिया की भौगोलिक समीक्ष* (द्वितीय सं.). गोरखपुर, भारतः वसुन्धरा.

12. लोढा, आर. एम. (2010). *औद्योगिक भूगोल* (चतुर्थ सं.). जयपुर, भारतः राजस्थान हिन्दी ग्रंथ अकादमी.

13. सक्सेना, एच. एम. (2011). *विश्व का प्रादेशिक भूगोल.* मेरठ, भारतः रस्तोगी.

14. सिंह, जे., एवं राव, बी. पी. (2007). *तीन दक्षिणी महाद्वीप* (सप्तम् सं.). गोरखपुर, भारतः वसुन्धरा.

Suggested e-learning materials:

1. Drainage of Australia

    https://www.7continentslist.com/australia/rivers-in-australia.php

2. Drainage of North America

    https://www.7continentslist.com/north-america/rivers-in-north-america.php

3. Physical features and climate of Australia

    https://saylordotorg.github.io/text_world-regional-geography-people-places-and-globalization/s15-australia-and-new-zealand.html

4. Climate, natural vegetation

    https://na.unep.net/atlas/africa/downloads/chapters/Africa_Atlas_English_Chapter_1.pdf

हिन्दी साहित्य
प्रथम समसत्र
HIND 103 हिन्दी व्याकरण एवं काव्यांग

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

अपेक्षित परिणाम

1. छात्राएँ शास्त्रीय व व्याकरणिक दृष्टि से भाषा व साहित्य के अध्ययन की समझ बना सकेंगी व काव्य शास्त्रीय परम्परा से सम्यक् रूप से अवगत हो सकेंगी ।

2. व्याकरण व काव्य के विविध अंगों से परिचय प्राप्त कर सकेंगी।

3. भाषा के शुद्ध प्रयोग की ओर प्रवृत होंगी।

4. प्रतियोगी परीक्षाओं हेतु हिन्दी व्याकरण की आधारभूत संरचना को समझ सकेंगी।

इकाई 1 रस : परिभाषा एवं स्वरूप विवेचन

रस के अंग – स्थायी भाव, विभाव, अनुभाव, संचारी भाव

रस के भेद – (नव रस)

इकाई 2 अलंकार : परिभाषा एवं स्वरूप

अलंकारों का वर्गीकरण

प्रमुख अलंकार : लक्षण, उदाहरण

(अनुप्रास, यमक, श्लेष, पुनुरूक्ति, वक्रोक्ति, उपमा, रूपक, प्रतीप, उत्प्रेक्षा, व्यतिरेक, सन्देह, भ्रान्तिमान, अतिशयोक्ति, विरोधाभास, अर्थान्तरन्यास, तद्गुण)

इकाई 3 छन्द : परिभाषा एवं स्वरूप

छन्द के भेद

प्रमुख छन्द : लक्षण, उदाहरण

(दोहा, सोरठा, कवित्त, सवैया, चौपाई, बरवै, छप्पय, कुण्डलिया)

इकाई 4 समास : परिभाषा एवं सामान्य नियम

सन्धि समास में अन्तर

समास के भेद –   अव्ययीभाव समास, तत्पुरुष समास

                बहुब्रीहि समास, द्वंद्व समास

इकाई 5 सन्धि : परिभाषा

सन्धि के प्रकार व नियम

स्वर सन्धि – दीर्घ, गुण, वृद्धि, यण, अयादि

व्यंजन सन्धि

विसर्ग सन्धि

सहायक पुस्तकें :

1. नन्दन, डॉ. वासुदेव, (2015), *आधुनिक हिन्दी व्याकरण और रचना,* भारतीय भवन पब्लिकेशन

2. गुरू, कामताप्रसाद, (2009), *हिन्दी व्याकरण,* नई दिल्ली, प्रकाशन संस्थान

3. शर्मा, वेंकटेश, (2006), *रस, अलंकार, छन्द तथा अन्य काव्यांग,* जोधपुर, राजस्थानी ग्रन्थाकार

4. शर्मा, आचार्य देवेन्द्रनाथ, (1981), *काव्य के तत्व,* इलाहाबाद, लोकभारती प्रकाशन

5. झारी, कृष्णदेव, (1985), *भारतीय काव्यशास्त्र के सिद्धान्त,* दिल्ली, शारदा प्रकाशन

6. गुप्त, सुरेश चन्द्र, (1972), *काव्यशास्त्र सिद्धान्त और वाद,* नई दिल्ली, आर्य बुक डिपो

7. कौशिक, डॉ. जगदीश प्रसाद, (1995), *रस, छन्द, अलंकार शास्त्र,* जयपुर, साहित्यगार

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vle.du.ac.in

http://egyankosh.ac.in/

HIND 104 उपन्यास साहित्य

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

अपेक्षित परिणाम

1. छात्राएँ हिन्दी उपन्यास एवं कहानी विधा से परिचित हो पाएँगी।

2. प्रेमचंद के लेखन एवं साहित्य के माध्यम से तद्युगीन परिस्थितियों को समझ सकेंगी।

3. छात्राएँ राष्ट्र की भावी नागरिक हैं, महाभोज उपन्यास पढ़ कर वे अपने सामाजिक एवं राजनीतिक उत्तरदायित्व के प्रति सचेत हो पाएँगी।

4. रचना के सामाजिक सन्दर्भों को देखने की दृष्टि विकसित कर पाएँगी।

इकाई—1 लेखक परिचय –

प्रेमचन्द : व्यक्तित्व एवं कृतित्व

इकाई—2 लेखक परिचय –

मन्नू भण्डारी : व्यक्तित्व एवं कृतित्व

इकाई—3 निर्मला – प्रेमचन्द, राजपाल एण्ड सन्स, दिल्ली, वर्ष 1927

इकाई—4 महाभोज – मन्नू भण्डारी, राधाकृष्ण प्रकाशन, दिल्ली, वर्ष 2010

इकाई—5 हिन्दी उपन्यास का प्रवृतिमूलक इतिहास

(क) स्वतंत्रता पूर्व हिन्दी उपन्यास

(ख) स्वांत्र्योत्तर हिन्दी उपन्यास

सहायक पुस्तकें :

1. मदान, डॉ. इन्द्रनाथ, (2000), *आज का हिन्दी उपन्यास*, नई दिल्ली, राजकमल प्रकाशन

2. वार्ष्णेय, डॉ. लक्ष्मीसागर, (1970), *हिन्दी उपन्यास : उपलब्धियाँ* , दिल्ली, राधाकृष्ण प्रकाशन

3. मिश्र, रामदरश, (1968), *हिन्दी उपन्यास : एक अन्तर्यात्रा*, दिल्ली, राजकमल प्रकाशन

4. सिन्हा, सुरेश, (1962), *हिन्दी उपन्यास : उद्भव और विकास*, इलाहाबाद, लोकभारती प्रकाशन

5. शर्मा, रामविलास, (1989), *प्रेमचन्द और उनका युग*, नई दिल्ली, राज कमल प्रकाशन

6. सिंह, शम्भुनाथ, (2018), *प्रेमचन्द का पुनर्मूल्यांकन*, नई दिल्ली, वाणी प्रकाशन

7. राय, गोपाल, (2016), *हिन्दी उपन्यास का इतिहास*, नई दिल्ली, राजकमल प्रकाशन

8. सिंह, त्रिभुवन, (1961), *हिन्दी उपन्यास और यथार्थवाद*, वाराणसी, हिन्दी प्रचारक पुस्तकालय

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http://egyankosh.ac.in/

द्वितीय समसत्र

HIND 101 हिन्दी कहानी

Max. Marks : 100 L T P C
(CA: 40 + ESA: 60) 4 0 0 4

अपेक्षित परिणाम

1. इस पाठ्यक्रम से छात्राओं को हिंदी कहानी साहित्य के उद्भव एवं विकास की जानकारी मिल पाएगी।
2. साहित्य एवं समकालीन समाज के अंतर्संबंध की समझ विकसित हो पाएगी।
3. अपने समाज और परिवेश के प्रति संवेदनशील हो पाएँगी।
4. छात्राओं में सृजनात्मक क्षमता की वृद्धि हो सकेगी।

इकाई–1 कहानियाँ – (1) कफन – प्रेमचन्द (2) आकाशदीप – जयशंकर प्रसाद (3) पत्नी – जैनेन्द्र कुमार (4) चित्र का शीर्षक – यशपाल

इकाई–2 कहानियाँ – (1) काकड़ां का तेली – उपेन्द्रनाथ ' अश्क' (2) जयदोल – अज्ञेय (3) गुलकी बन्नो – धर्मवीर भारती (4) उड़ान – कृष्ण बलदेव वैद

इकाई–3 कहानियाँ – (1) आर्द्रा – मोहन राकेश (2) लाल पान की बेगम – फणीश्वरनाथ रेणु (3) वापसी – उषा प्रियंवदा (4) कर्मनाशा की हार – शिवप्रसाद सिंह

इकाई–4 कहानियाँ – (1) जिन्दगी और जोंक – अमरकान्त (2) पिता – ज्ञानरंजन (3) कोसी का घटवार – शेखर जोशी (4) तिरिछ –उदय प्रकाश

इकाई–5 हिन्दी कहानी का प्रवृत्तिमूलक इतिहास

(क)स्वतन्त्रता पूर्व हिन्दी कहानी

(ख) स्वातन्त्र्योत्तर हिन्दी कहानी

पाठ्यपुस्तक – 'प्रतिनिधि कहानियाँ' – सं. डॉ. बच्चन सिंह, अनुराग प्रकाशन, वाराणसी।

सहायक पुस्तकें:–

1. सिंह, नामवर (2016). *कहानी : नई कहानी*, इलाहाबाद, लोकभारती प्रकाशन

2. कमलेश्वर, (2015). *नई कहानी की भूमिका*, नई दिल्ली, राजकमल प्रकाशन

3. कुमार, केसरी, *हिन्दी के कहानीकार*, पटना, मोतीलाल बनारसीदास

4. कोहली, नरेन्द्र, (1967). *कुछ प्रसिद्ध कहानियों के विषय में*, इलाहाबाद, उमेश प्रकाशन.

5. पाण्डेय, डॉ. रमेश, *हिन्दी कहानी साहित्य*, रतन बुक डिस्ट्रिब्यूटर्स

6. सिन्हा, सुरेश, *हिन्दी कहानी – उद्भव और विकास*, इलाहाबाद, अशोक प्रकाशन

7. सिंहल, शशिभूषण (1988). *हिन्दी साहित्य : विधाएँ और दिशाएँ*, नई दिल्ली, प्रवीण प्रकाशन

8. मदान, इन्द्रनाथ (2002). *आज की कहानी*, नई दिल्ली, राजकमल प्रकाशन

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http://egyankosh.ac.in/

HIND 105 मध्ययुगीन काव्य

Max. Marks : 100　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　**4　0　0　4**

अपेक्षित परिणाम

1. छात्राएँ मध्ययुगीन काव्य आंदोलनों एवं प्रवृत्तियों को समझ सकेंगी।

2. भक्तिकाल के लोकजागरण की पृष्ठभूमि के सांस्कृतिक आधार से परिचित होंगी।

3. सामाजिक समस्याओं के उन्मूलन में साहित्य की भूमिका समझ सकेंगी।

4. भक्तिकालीन कवियों के साहित्यिक एवं सामाजिक अवदान से परिचित हो सकेंगी।

इकाई 1 (क) कबीरदास – कबीर ग्रन्थावली, डॉ. पुष्पपाल सिंह, अशोक प्रकाशन, नई दिल्ली।

　　1. समाज सुधार

　　2. भक्ति

　　3. व्याख्या – (गुरुदेव को अंग – 3, 4, 20, 26 चितावणी को अंग – 6, 10, 13, 15, साँच को अंग–13 भ्रमविधौसण को अंग –10 भेष को अंग– 6,12,14, साध को अंग–1,3 पद – 1, 16, 338)

(ख) **मलिक मुहम्मद जायसी** – जायसी ग्रन्थावली – सं. आचार्य रामचन्द्र शुक्ल, नागरी प्रचारिणी सभा, वाराणसी, प्रकाशन – 2002

1. विरह
2. रहस्यवाद
3. व्याख्या – (नागमती सुआ संवाद खण्ड)

इकाई 2 (क) **मीराँ** – मीराँ की पदावली – सं. आचार्य परशुराम चतुर्वेदी, राजस्थानी ग्रंथाकार, जोधपुर, प्रकाशन – 2012

1. भक्ति
2. काव्यगत वैशिष्ट्य
3. व्याख्या – (पद सं.– 2, 3, 18, 19, 20, 22, 23, 34, 39, 40)

(ख) **सूरदास** – सूर पंचरत्न, संकलनकर्ता, लाला भगवानदीन तथा पं मोहनवल्लभ पन्त

1. वात्सल्य
2. भ्रमरगीत का काव्यगत वैशिष्ट्य
3. व्याख्या – विनय–12, 24, बाल कृष्ण– 9, 31, 37,
   भ्रमर गीत– 6, 16, 25, 34, 35

इकाई 3 (क) **तुलसीदास** – कवितावली, विनय पत्रिका, गीताप्रेस, गोरखपुर,

1. विनय भावना
2. समन्वय साधना
3. व्याख्या – कवितावली–प्रारम्भिक 5 छन्द,
   विनय पत्रिका– प्रारम्भिक 5 छन्द,

(ख) **रहीम** – रहीम ग्रन्थावली, विद्यानिवास मिश्र, गोविन्द रजनीश, वाणी प्रकाशन, नई दिल्ली, 1985

1. काव्यगत वैशिष्ट्य
2. भक्ति और नीति
3. व्याख्या – दोहावली– (8, 15, 25, 35, 49, 52, 59, 81, 82, 93, 96, 136, 140, 180, 214, भक्ति परक बरवै – 2, 13, 43, 50, 51)

इकाई 4 (क) **केशव** – मध्यकालीन काव्य संग्रह – ब्रजेश्वर वर्मा, विश्वविद्यालय प्रकाशन, वाराणसी, 1973

1. आचार्यत्व
2. बहुज्ञता
3. व्याख्या – सम्पूर्ण अंश

(ख) **बिहारी** – बिहारी रत्नाकर, सं. जगनाथ दास रत्नाकर, गंगा ग्रन्थकार, वाराणसी, 1969

1. रीति सिद्धत्व
2. उक्ति वैचित्र्य
3. व्याख्या – दोहा सं. 1, 35, 38, 61, 69, 71, 73, 84, 121, 146, 158, 171, 228, 229, 341, 351, 391, 574, 624, 635

(ग) **घनानन्द** – मध्यकालीन काव्य संग्रह – ब्रजेश्वर वर्मा, विश्वविद्यालय प्रकाशन, वाराणसी, 1973

1. विरह
2. काव्यगत वैशिष्ट्य
3. व्याख्या – सम्पूर्ण अंश

इकाई 5 हिन्दी साहित्य का इतिहास

(क) आदिकाल
(ख) भक्तिकाल
(ग) रीतिकाल

सहायक पुस्तके :

1. चतुर्वेदी, परशुराम, (1975), *कबीर साहित्य की परख*, वाराणसी, नागरी प्रचारणी सभा
2. सक्सेना, द्वारिका प्रसाद, (2004), *पद्मावत में काव्य संस्कृति और दर्शन*, जोधपुर, नवभारत प्रकाशन
3. सक्सेना, द्वारिका प्रसाद, *हिन्दी के प्राचीन प्रतिनिधि कवि*, आगरा, विनोद पुस्तक मन्दिर
4. त्रिपाठी, विश्वनाथ, (1988), *मीरा का काव्य*, नई दिल्ली, वाणी प्रकाशन
5. सिंह, उदयभानु, (2002), *तुलसी काव्य मीमांसा*, नई दिल्ली, राधाकृष्ण प्रकाशन
6. गौड़, मनोहर लाल, *घनानन्द और स्वच्छंदतावाद*, काशी, नागरी प्रचारिणी सभा
7. सोनटक्के, माधव, (2000), *हिन्दी साहित्य का इतिहास*, कानपुर, विकास प्रकाशन
8. डॉ. नगेन्द्र, (1981), *हिन्दी साहित्य का इतिहास*, नई दिल्ली, नेशनल पब्लिशिंग हाउस
9. शुक्ल, रामचन्द्र, (2002), *हिन्दी साहित्य का इतिहास*, दिल्ली, प्रकाशन संस्थान

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तृतीय समसत्र

HIND 205 आधुनिक काव्य –I

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

अपेक्षित परिणाम

1. आधुनिक कविता के उद्भव की प्रवृत्तियों को समझने की क्षमता विकसित कर पाएँगी।

2. स्वतंत्रता आंदोलन पर हिन्दी साहित्य के प्रभावों के अध्ययन में सक्षम हो सकेंगी।

3. प्रमुख काव्यांदोलनों की मूल भावनाओं से परिचित हो सकेंगी।

4. नवीन काव्य प्रतिमानों, शैली, भाषा के परिवर्तनों से परिचित हो सकेंगी।

इकाई 1 (क) **भारतेन्दु हरिश्चंद्र–** भारत वीरत्व, हिंदी भाषा, स्फुट कविताएँ, यमुना शोभा (आरंभिक पांच पद), चूरन अमलबेद का भारी (अंधेर नगरी, पृ, 52)

         (ख) **मैथिलीशरण गुप्त–** कैकेयी अनुताप, उर्मिला, यशोधरा तथा व्यापार– विविध प्रसंग (कविता, की छंद संख्या 27 से 36 तक)

इकाई 2 (क) **जयशंकर प्रसाद–** श्रद्धा (आरंभिक 15 छंद), हे लाज भरे सौंदर्य बता दो, ले चल वहां भुलावा देकर, अरुण यह मधुमय देश हमारा

         (ख) **सुमित्रानंदन पंत–** मौन निमंत्रण, ताज, परिवर्तन, भारत माता, धरती कितना देती है

इकाई 3 सूर्यकांत त्रिपाठी निराला– जूही की कली, सरोज स्मृति,

         भिक्षुक, विधवा, जागो फिर एक बार

इकाई 4 महादेवी वर्मा– कौन पहुंचा देगा उस पार, क्या जलने की रीति शलभ, प्रिय पथ के यह शूल, चुभते ही तेरा अरुनबान, यह विदा बेला

इकाई 5 आधुनिक कविता का प्रवृत्तिमूलक इतिहास

         क) भारतेन्दु और द्विवेदीयुगीन कविता

         ख) छायावादी कविता

पाठ्यपुस्तक – आधुनिक काव्य संग्रह, केन्द्रीय हिन्दी संस्थान, आगरा, सम्पादक – रामवीर सिंह, विश्वविद्यालय प्रकाशन, वाराणसी, 2016

सहायक पुस्तकें –

1. गुप्ता, किशोरीलाल, (1953), *भारतेन्दु और उनके अन्य सहयोगी कवि,* आगरा, साहित्य रत्न भण्डार।

2. डॉ. प्रेमशंकर, (2012), *प्रसाद का काव्य*, रांची, भारती भण्डार।

3. डॉ. नगेन्द्र, (1998), *सुमित्रानन्दन पंत*, नई दिल्ली, नेशनल पब्लिशिंग हाउस।

4. श्रीवास्तव, डॉ. परमानन्द, (1990), *निराला की कविताएँ*, नई दिल्ली, साहित्य अकादमी।

5. पाण्डेय, गंगाप्रसाद, (1969), *महीयसी महादेवी*, इलाहाबाद, लोकभारती प्रकाशन।

6. सिंह, नामवर, (2006), *छायावाद*, दिल्ली, राजकमल प्रकाशन।

7. डॉ. नगेन्द्र, (1981), *हिन्दी साहित्य का इतिहास*, नई दिल्ली, नेशनल पब्लिशिंग हाउस।

8. द्विवेदी, हजारी प्रसाद, (2005), *हिन्दी साहित्य की भूमिका*, इलाहाबाद, लोकभारती प्रकाशन।

9. पाण्डेय, जनार्दन, (1982), *मैथिलीशरण गुप्त के काव्य में भारतीय संस्कृति की अभिव्यक्ति*, इलाहाबाद, सरस्वती प्रकाशन।

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HIND 203 हिन्दी नाटक एवं एकांकी

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

अपेक्षित परिणाम

1. नाटक व रंगमंच के प्रति रूचि जागृत हो पाएगी।

2. नाटक व रंगमंच विधा की विविध शैलियों से परिचित हो सकेंगी ।

3. पठित नाटकों के आधार पर नाटक के क्रमिक बदलते स्वरुप से परिचित हो सकेंगी।

4. छात्राएँ हिन्दी नाटककारों की मान्यताओं को समझने में समर्थ हो सकेंगी।

इकाई 1 नाटक – ध्रुवस्वामिनी – जयशंकर प्रसाद, वाणी प्रकाशन, दिल्ली, 2010

इकाई 2 नाटक – कबिरा खड़ा बाजार में – भीष्म साहनी, राजकमल प्रकाशन, दिल्ली, 2012

इकाई 3 एकांकी –एकांकी सप्तक – सं. भारतरत्न भार्गव, दी स्टूडेण्ट्स बुक कम्पनी, चौड़ा रास्ता, जयपुर, 1994।

(स्ट्राइक–भुवनेश्वर, चन्द्रलोक–रामकुमार वर्मा, लक्ष्मी का स्वागत – उपेन्द्रनाथ अश्क)

इकाई 4 एकांकी –एकांकी सप्तक – सं. भारतरत्न भार्गव, दी स्टूडेण्ट्स बुक कम्पनी, चौड़ा रास्ता, जयपुर, 1994।

(रीढ़ की हड्डी –जगदीश चन्द्र माथुर, मीना कहाँ है –विष्णु प्रभाकर, मशीन –सफदर हाशमी, हरी घास पर घन्टे भर – सुरेन्द्र वर्मा)

इकाई 5 हिन्दी नाटक एवं एकांकी का उद्भव और विकास

(क) हिन्दी नाटक : उद्भव और विकास

(ख) हिन्दी एकांकी : उद्भव और विकास

सहायक पुस्तकें :

1. जोशी, जगदीशचन्द, (1960), *प्रसाद के ऐतिहासिक नाटक*, आगरा, सरस्वती पुस्तक सदन।

2. गुप्ता, शांति स्वरूप, (1969), *प्रसाद के नाटक एवं नाट्य शिल्प*, दिल्ली अशोक प्रकाशन।

3. महेन्द्र, रामचन्द्र, (1989), *एंकाकी और एकांकीकार*, नई दिल्ली, वाणी प्रकाशन।

4. ओझा, दशरथ, (2013), *हिन्दी नाटक : उद्भव और विकास*, नई दिल्ली, राजपाल प्रकाशन।

5. गुप्ता, डॉ. सोमनाथ, (2000), *हिन्दी नाटक और साहित्य का इतिहास*, जालंधर और इलाहाबाद, हिन्दी भवन।

6. त्रिपाठी, डॉ. वशिष्ठ नारायण, (1991), *नाटक के रंगमंचीय प्रतिमान*, दिल्ली, जगतराम प्रकाशन।

7. शर्मा, विश्वनाथ, (2001), *हिन्दी रंगमंच का उद्भव और विकास*, दिल्ली, साहित्य प्रकाशन।

8. कुमार, सिद्धनाथ, (2001), *हिन्दी एकांकी*, दिल्ली, राधाकृष्ण प्रकाशन।

9. महेन्द्र, रामचरण, (1965), *प्रतिनिधि एकांकी*, दिल्ली, वाणी प्रकाशन।

ई–सामग्री स्रोत –

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चतुर्थ समसत्र

HIND 206 आधुनिक काव्य–II

Max. Marks : 100   L   T   P   C

(CA: 40 + ESA: 60)   4   0   0   4

अपेक्षित परिणाम

1. प्रवृत्ति विशेष के प्रमुख कवियों के व्यक्तित्व, कृतित्व व युगीन परिवेश से छात्राएँ सम्यक् रूप से अवगत हो पाएँगी।

2. आधुनिक काव्य की प्रवृत्तियों ,इनका अपने पूर्ववर्ती काव्य प्रवृत्तियों से नयापन व जुड़ाव, की जानकारी ग्रहण कर सकेंगी।

3. साहित्य व समाज के सम्बंध को व्यापक रूप से समझने की दृष्टि विकसित कर पाएँगी।

4. आधुनिक कविता के भावगत व शिल्पगत परिवर्तनों को समझ सकेंगी।

इकाई 1 (क) **रामधारी सिंह 'दिनकर'** – (हिमालय, बालिका से वधू वन फूलों की ओर, प्रभाती, बुद्धदेव)

       (ख) **हरिवंश राय 'बच्चन'** – (पपीहा और चील कौए, पथ की पहचान, तुम गा दो मेरा गान, लहरों का निमन्त्रण, अमर है मरने का सन्देश)

इकाई 2   **नागार्जुन** – (कालिदास, बादल को घिरते देखा है, तर्पण, तुम किशोर तुम तरुण)

इकाई 3 (क) **अज्ञेय** – (बावरा अहेरी, कलगी बाजरे की, यह दीप अकेला, छब्बीस जनवरी, साँप)

       (ख) **मुक्तिबोध** – (दूर तारा, खोल आँखें, मृत्यु और कवि)

इकाई 4 (क) **सर्वेश्वर दयाल सक्सेना** – (सौन्दर्य बोध, सूखे पीले पत्तों ने कहा, विवशता)

       (ख) **धूमिल** – (गाँव, मोचीराम, शहर में सूर्यास्त,)

इकाई 5 छायावादोत्तर कविता का इतिहास

       (क) राष्ट्रीय सांस्कृतिक कविता धारा

       (ख) प्रगतिवाद

       (ग) प्रयोगवाद

       (घ) नई कविता

       (ङ) समकालीन कविता

पाठ्यपुस्तक – आधुनिक काव्य संग्रह – केन्द्रीय हिन्दी संस्थान आगरा, सम्पादक – रामवीर सिंह, विश्वविद्यालय प्रकाशन, वाराणसी, 2016

सहायक पुस्तकें :

1. डॉ. शेखरचन्द्र, (1973), *राष्ट्रकवि दिनकर और उनकी काव्य कला,* जयपुर, पुस्तक सदन।

2. पाठक, डॉ. जितराम, (1976), *आधुनिक हिन्दी काव्य में राष्ट्रीय चेतना का विकास,* इलाहाबाद, राजीव प्रकाशन।

3. सिन्हा, डॉ. शैल, (1969), *अज्ञेय और प्रयोगवाद,* दिल्ली, अशोक प्रकाशन।

4. प्रसाद, राजेन्द्र, (1978), *अज्ञेय : कवि और काव्य,* नई दिल्ली, वाणी प्रकाशन।

5. बांडिबडेकर, चन्द्रकान्त, (1971), *अज्ञेय की कविता : एक मूल्यांकन,* इलाहाबाद, सरस्वती प्रेस।

6. विमल, गंगाप्रसाद, (1969), *गजानन माधव मुक्तिबोध का रचना संसार,* दिल्ली, सुषमा पुस्तकालय।

7. देवकी, डॉ. एम.जी. (1995), *आधुनिक साहित्य के कुछ हस्ताक्षर,* त्रिरूवेनन्दपुरम्, केरल हिन्दी प्रचार सभा।

8. सिंह, शम्भूनाथ, (1960), *प्रयोगवाद और नई कविता,* पूना, समकालीन प्रकाशन।

9. तिवारी, डॉ. विश्वनाथ प्रसाद, (2010), *आधुनिक हिन्दी कविता,* दिल्ली, राजकमल प्रकाशन।

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11. मिश्र, शिवकुमार, (1962), *नया हिन्दी काव्य,* कानपुर, अनुसंधान प्रकाशन।

12. सिंह, डॉ. बच्चन, (1999), *आधुनिक हिन्दी साहित्य का इतिहास,* इलाहाबाद, लोकभारती प्रकाशन।

13. मिश्र, अनन्त, (1987), *स्वातंत्र्योत्तर हिन्दी कविता,* नई दिल्ली, प्रकाशन संस्थान।

ई–सामग्री स्रोत –

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HIND 204 संस्मरण एवं जीवनी

		L	**T**	**P**	**C**
Max. Marks : 100					
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

अपेक्षित परिणाम

1. छात्राओं में सकारात्मक सोच विकसित हो पाएगी।
2. उनके व्यक्तित्व का बहुआयामी विकास हो पाएगा।
3. लेखन शैली और चिंतन क्षमता का विकास हो पाएगा।
4. अन्य प्रेरणादायक व्यक्तित्व से सीखने की अभिरूचि विकसित हो पाएगी।

इकाई 1 लेखक परिचय –

महादेवी वर्मा– व्यक्तित्व एवं कृतित्व

इकाई 2 लेखक परिचय –

विश्वनाथ त्रिपाठी– व्यक्तित्व एवं कृतित्व

इकाई 3 संस्मरण – पथ के साथी, महादेवी वर्मा, लोकभारती प्रकाशन, इलाहाबाद, 2008

इकाई 4 व्योमकेश दरवेश – विश्वनाथ त्रिपाठी, राजकमल प्रकाशन, 2011

इकाई 5 हिन्दी संस्मरण एवं जीवनी का उद्भव एवं विकास

(क) संस्मरण : उद्भव एवं विकास

(ख) जीवनी : उद्भव एवं विकास

सहायक पुस्तकें :

1. गुप्त, सुरेशचन्द्र, (1990), *हिन्दी गद्य साहित्य,* नई दिल्ली, अशोक प्रकाशन।

2. गुप्त, प्रकाशचन्द्र, (1992), *नया हिन्दी साहित्य : एक भूमिका,* बनारस, सरस्वती प्रेस।

3. तिवारी, रामचन्द्र, (1992), *हिन्दी का गद्य साहित्य,* दिल्ली विश्वविद्यालय प्रकाशन।

4. शर्मा, मनोरमा, (1985), *संस्मरण और संस्मरणकार,* कानपुर, आराधना प्रकाशन।

5. शुक्ल, कृपाशंकर, (1993), *आधुनिक हिन्दी साहित्य का इतिहास,* काशी, टेढी नीम, होलीकोत्सव ।

6. डॉ. नगेन्द्र, (1981), *हिन्दी साहित्य का इतिहास,* नई दिल्ली, नेशनल पब्लिशिंग हाउस।

7. दीक्षित, डॉ. सुकेशिनी,(2019), *महादेवी वर्मा के साहित्य में उनका व्यक्तित्व,* कानपुर, विद्या प्रकाशन।

8. ओ., डॉ. जयश्री,(2019), *महादेवी वर्मा का गद्य साहित्य –एक पुनर्मूल्यांकन*, कानपुर, विद्या प्रकाशन।

9. देसाई, डॉ. बापूराव,(2019), *संस्मरण साहित्य विधा : शास्त्र और इतिहास*, कानपुर, विद्या प्रकाशन।

10. अक्षत, डॉ. राजेन्द्र सोनवणे, (2019), *हिन्दी की विविध विधाओं का नवीन दृष्टिकोण*, कानपुर, विद्या प्रकाशन।

11. शुक्ला, डॉ. माधुरी, (2019), *महादेवी वर्मा के गद्य साहित्य में सामाजिक चेतना एवं संवेदनाएँ*, कानपुर, विद्या प्रकाशन।

12. त्रिपाठी, विश्वनाथ(2004), *नंगातलाई का गाँव, दिल्ली*, राजकमल प्रकाशन।

13. तिवारी, विश्वनाथ प्रसाद(1989), *हजारी प्रसाद द्विवेदी*, नई दिल्ली, साहित्य अकादमी ।

14. त्रिपाठी, राममूर्ति(1997), *साहित्यकार और चिंतक आचार्य हजारी प्रसाद द्विवेदी*, इलाहाबाद, हिंदुस्तानी अकादमी।

ई–सामग्री स्रोत –

https://epgp.inflibnet.ac.in/

पंचम समसत्र

HIND 302 हिन्दी निबन्ध एवं आलोचना

Max. Marks : 100   **L T P C**

(CA: 40 + ESA: 60)   **4 0 0 4**

अपेक्षित परिणाम

1. हिन्दी गद्य के विश्लेषणात्मक अध्ययन में समर्थ हो पाएँगी।

2. निबंध के अध्ययन से साहित्य के विस्तार के संश्लेषणात्मक रूप का ज्ञान अर्जित कर पाएँगी।

3. साहित्य के बौद्धिक एवं तार्किक पक्ष से अवगत होने के साथ ही भारतीय परंपरा के दार्शनिक चिंतन से परिचय प्राप्त कर पाएँगी।

4. हिन्दी आलोचना के माध्यम से छात्राओं में समालोचनात्मक व्यक्तित्व का विकास हो पाएगा।

5. साहित्यिक कृतियों के उचित मूल्यांकन की दृष्टि को विकसित कर पाएँगी।

6. उच्च शिक्षा में शोधकार्यों एवं शोध पत्र लेखन की क्षमता विकसित कर पाएँगी।

इकाई 1 लेखक परिचय–

रामचन्द्र शुक्ल – व्यक्तित्व एवं कृतित्व

इकाई 2 लेखक परिचय–

रामविलास शर्मा – व्यक्तित्व एवं कृतित्व

इकाई 3 निबन्ध – चिन्तामणि भाग–1 – रामचन्द्र शुक्ल, राजकमल प्रकाशन, दिल्ली, 1948,

(भाव या मनोविकार, श्रद्धा और भक्ति, करुणा, लोभ और प्रीति, ईर्ष्या)

इकाई 4 आलोचना–परम्परा का मूल्यांकन – रामविलास शर्मा, राजकमल प्रकाशन, दिल्ली, 1981,

(परम्परा का मूल्यांकन, सन्त साहित्य के अध्ययन की समस्याएँ, तुलसी साहित्य के सामन्त विरोधी मूल्य, रीतिकालीन काव्य परम्परा, भारतेन्दु हरिश्चन्द्र)

इकाई 5 हिन्दी निबन्ध एवं आलोचना का उद्भव एवं विकास

(क) हिन्दी निबन्ध : उद्भव एवं विकास

(ख) हिन्दी आलोचना : उद्भव एवं विकास

सहायक पुस्तकें :

1. सक्सेना, लालता प्रसाद, (1973), *निबन्धकार आचार्य रामचन्द्र शुक्ल*, जयपुर, निर्मल प्रकाशन।

2. तिवारी, विश्वनाथ प्रसाद, (1985), *आचार्य रामचन्द्र शुक्ल*, नई दिल्ली, नेशनल पब्लिशिंग हाउस।

3. बंसल एवं सिंहल, पुष्पा एवं शशि भूषण, (1986), *आचार्य रामचन्द्र शुक्ल के बहुमुखी कृतित्व का सर्वांगीण विवेचन*, नई दिल्ली, ऋषभचरण जैन एंव सन्तति ।

4. तिवारी, विश्वनाथ प्रसाद, (1985), *रामविलास शर्मा*, नई दिल्ली, वाणी प्रकाशन।

5. मनु प्रकाश,(1991), *रामविलास शर्मा : व्यक्ति और कवि*, नई दिल्ली, नेशनल पब्लिशिंग हाउस।

6. सिंह सुधा, (2002), *आधुनिक साहित्य और रामविलास शर्मा*, दिल्ली, स्वराज प्रकाशन।

7. सक्सेना, द्वारिका प्रसाद, (1983), *हिन्दी के प्रतिनिधि निबंधकार*, आगरा, विनोद पुस्तक मन्दिर।

ई–सामग्री स्रोत –

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षष्ठम समसत्र

HIND 304 व्यंग्य एवं रिपोर्ताज साहित्य

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

अपेक्षित परिणाम

1. व्यंग्य व रिपोर्ताज विधा की विशिष्टताओं को समझ पाएँगी।

2. यथार्थ घटनाओं को संवेदनशील साहित्यिक शैली में प्रस्तुत करने की क्षमता विकसित कर पाएँगी।

3. पत्रकारिता व पत्रकार की जनपक्षरता से परिचित हो पाएँगी।

4. छात्राओं में सृजनात्मकता विकसित हो पाएगी।

इकाई 1 लेखक परिचय–

हरिशंकर परसाई – व्यक्तित्व एवं कृतित्व

इकाई 2 लेखक परिचय–

रांगेय राघव – व्यक्तित्व एवं कृतित्व

इकाई 3 व्यंग्य–ठिठुरता हुआ गणतंत्र–हरिशंकर परसाई राजकमल पेपरबैक्स इलाहाबाद – 2018

इकाई 4 रिपोर्ताज – तूफानों के बीच – रांगेय राघव राधाकृष्ण पेपरबैक्स – 2012

इकाई 5 हिन्दी व्यंग्य एवं रिपोर्ताज का उद्भव एवं विकास

(क) व्यंग्य : उद्भव एवं विकास

(ख) रिपोर्ताज : उद्भव एवं विकास

सहायक पुस्तकें :

1. तिवारी, रामचन्द्र, (1992), *हिन्दी का गद्य साहित्य*, इलाहाबाद, विश्वविद्यालय प्रकाशन।

2. डॉ. नगेन्द्र, (1973), *हिन्दी साहित्य का इतिहास*, दिल्ली, नेशनल पब्लिशिंग हाउस।

3. गुप्त, डॉ. गणपति चन्द्र, (1986), *हिन्दी साहित्य का वैज्ञानिक इतिहास*, इलाहाबाद, लोक भारती प्रकाशन।

4. सिंह, डॉ. नामवर, (1991), *आधुनिक साहित्य की प्रवृत्तियाँ*, इलाहाबाद, लोक भारती प्रकाशन।

5. शुक्ला, शशि, (2007), *हरिशंकर परसाई का व्यंग्य साहित्य,* नई दिल्ली, मेधा बुक्स।

6. राघव, कपिल कुमार सिंह, (2015), *हरिशंकर परसाई का व्यंग्य साहित्य,* नई दिल्ली, राज पब्लिकेशन।

7. नंदन, सं.कन्हैया लाल, (2019), *परसाई परम्परा का वाहक,* कानपुर, विद्या प्रकाशन।

8. पटेल, डॉ. भरत, (2019), *व्यंग्यकार हरिशंकर परसाई,* कानपुर, विद्या प्रकाशन ।

9. सिंह, डॉ. संध्या कुमारी, (2019), *परसाई के साहित्य में समकालीन यथार्थ,* कानपुर, विद्या प्रकाशन।

10. मधुरेश, (1999), *रांगेय राघव,* नई दिल्ली, साहित्य अकादमी।

11. गौड़, डॉ. सुरिंदर कौर, (2019), *डॉ. रांगेय राघव के गद्य साहित्य में जीवन दर्शन,* कानपुर, विद्या प्रकाशन।

ई–सामग्री स्रोत –

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चयनित पाठ्यक्रम समूह

HIND 301 आत्मकथा एवं डायरी साहित्य

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

अपेक्षित परिणाम

1. आत्मकथा व डायरी विधा की विशेषताओं की समझ बना पाएँगी।

2. चयनित विधाओं में कालक्रमानुसार परिवर्तन व परिवर्द्धन से अवगत हो पाएँगी।

3. चयनित विधाओं के युग – परिवेश व समाज को प्रभावित करने वाले कारकों से परिचित हो पाएँगी।

4. आत्मकथा एवं डायरी लेखन क्षमता को विकसित कर पाएँगी।

इकाई 1 लेखक परिचय–

पाण्डेय बेचन शर्मा 'उग्र' : व्यक्तित्व एवं कृतित्व

इकाई 2 लेखक परिचय–

रामधारीसिंह 'दिनकर' : व्यक्तित्व एवं कृतित्व

इकाई 3 आत्मकथा – अपनी खबर– पाण्डेय बेचन शर्मा उग्र, राजकमल प्रकाशन, दिल्ली, 2016

इकाई 4 डायरी –दिनकर की डायरी –रामधारीसिंह दिनकर, नेशनल पब्लिशिंग हाउस, दिल्ली, 1998

इकाई 5 हिन्दी आत्मकथा एवं डायरी का उद्भव एवं विकास

(क) आत्मकथा : उद्भव एवं विकास

(ख) डायरी : उद्भव एवं विकास

सहायक पुस्तकें :–

1. गुप्त, सुरेशचन्द्र, (1990), *हिन्दी गद्य साहित्य*, नई दिल्ली, अशोक प्रकाशन।

2. गुप्त, प्रकाशचन्द्र, (1997), *नया हिन्दी साहित्य : एक भूमिका*, बनारस, सरस्वती प्रेस।

3. तिवारी, रामचन्द्र, (1992), *हिन्दी का गद्य साहित्य*, वाराणसी, विश्वविद्यालय प्रकाशन।

4. डॉ. नगेन्द्र, (1973), *हिन्दी साहित्य का इतिहास*, नई दिल्ली, नेशनल पब्लिशिंग हाउस।

5. शुक्ल, कृपाशंकर, (1993), *आधुनिक हिन्दी साहित्य का इतिहास*, काशी, टेढी नीम, होलीकोत्सव ।

6. चतुर्वेदी, पंकज, (2003), *आत्मकथा की संस्कृति संदर्भ 'अपनी खबर'*, नई दिल्ली, वाणी प्रकाशन।

7. सिंह ,कमलेश, (1989), *हिन्दी आत्मकथा : स्वरूप एवं साहित्य*, नई दिल्ली, नेशनल पब्लिशिंग हाउस।

8. .मीणा, उमा, (2015), *आत्मकथा साहित्य स्मृतियों का प्राख्यान*, नई दिल्ली, स्वराज प्रकाशन।

9. देसाई, डॉ. बापूराव, (2019), *डायरी साहित्य विधा : शास्त्र और इतिहास*, कानपुर, विद्या प्रकाशन

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HIND 306 हिन्दी यात्रा साहित्य

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		4	0	0	4

अपेक्षित परिणाम

- यात्रा विवरण लेखन –कौशल का विकास होगा ।

- छात्राओं की सृजनात्मक मानसिकता का विकास होगा ।

- यात्रा साहित्यकारों से परिचित होकर साहित्य व समाज के प्रति संवेदनशील होंगी ।
- भारतीय व पाश्चात्य यात्रा अनुभव द्वारा नैतिक व सांस्कृतिक मूल्यों का विकास होगा ।

इकाई–1 मेरी तिब्बत यात्रा – राहुल सांकृत्यायन, छात्रहितकारी पुस्तकमाला, दारागंज, प्रयाग, 1937

इकाई–2 अरे यायावर रहेगा याद – सच्चिदानन्द हीरानन्द वात्स्यायन ''अज्ञेय'', राजकमल प्रकाशन, नई दिल्ली

इकाई–3 चीड़ों पर चाँदनी – निर्मल वर्मा, राजकमल प्रकाशन, नई दिल्ली, 2005

इकाई–4 आखिरी चट्टान तक – मोहन राकेश, भारतीय ज्ञानपीठ, 2010

इकाई–5 हिन्दी यात्रा साहित्य का प्रवृत्तिमूलक इतिहास

    (क) स्वतंत्रता पूर्व हिन्दी यात्रा साहित्य

    (ख) स्वतंत्रता पश्चात् हिन्दी यात्रा साहित्य

सहायक पुस्तकें :

1 शर्मा, डॉ. प्रतापलाल (2003),*हिंदी का आधुनिक यात्रा–साहित्य*, मथुरा, अमर प्रकाशन

2. उप्रेती, डॉ. रेखा प्रवीण (2000), *हिंदी का यात्रा–साहित्य (सन 1960 से 1990 तक)*, नई दिल्ली, हिंदी बुक सेंटर

3. भाटिया, डॉ. कैलाश चन्द्र एवं भाटिया, रचना (1996), *साहित्य में गद्य की नई विविध विधाएं*, नई दिल्ली, तक्षशिला प्रकाशन

4. तिवारी, डॉ. रामचंद्र (1968), *हिंदी का गद्य साहित्य*, वाराणसी, विश्वविद्यालय प्रकाशन

5. माथुर, डॉ. सुरेन्द्र (1962), *यात्रा–साहित्य का उद्भव और विकास* , दिल्ली ,साहित्य प्रकाशन

6. सांकृत्यायन, राहुल (1949), *घुमक्कड़ शास्त्र*, नई दिल्ली, राजकमल प्रकाशन

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HIND 305 महिला आत्मकथा लेखन

Max. Marks : 100　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　**4　0　0　4**

अपेक्षित परिणाम

- आत्मकथाओं के माध्यम से छात्राएं स्त्रियों की बदलती छवि से परिचित हो सकेंगी।

- साहित्य व सामाजिक सरोकारों को समझने में समर्थ हो सकेंगी।

- छात्राएं स्त्री लेखन की विशिष्टता से परिचित हो सकेंगी।

- छात्राएं महिलाओं के अपने गहन अनुभवों को बाँटने के हौसलों से प्रेरणा ले सकेंगी।

- स्त्री मनोविज्ञान, स्त्री शोषण, स्त्री शक्ति व स्त्री संघर्ष आदि मुद्दों से परिचित हो सकेंगी।

इकाई–1 दोहरा अभिशाप – कौशल्या बैसन्त्री ,परमेश्वरी प्रकाशन, दिल्ली, 2009

इकाई–2 एक कहानी यह भी – मन्नू भण्डारी ,राधा कृष्ण प्रकाशन, दिल्ली, 2007

इकाई–3 हादसे – रमणिका गुप्ता, राधा कृष्ण प्रकाशन, दिल्ली, 2005

इकाई–4 हाशिए की इबारतें – चन्द्रकान्ता, राजकमल प्रकाशन, दिल्ली, 2009

इकाई–5 आत्मकथा लेखन का प्रवृत्तिमूलक इतिहास

　　　(क) स्वतंत्रता पूर्व आत्मकथा लेखन

　　　(ख) स्वतंत्रता पश्चात आत्मकथा लेखन

सहायक पुस्तकें :

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2. कुमार, राकेश, (2001), *नारीवादी विमर्श,* पंचकुला हरियाणा, आधार प्रकाशन

3. खेतान, प्रभा, (अनुवादक), (2002), *स्त्री उपेक्षिता,* नई दिल्ली, हिन्दी पाकेट बुक्स

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6. डॉ. नगेन्द्र, (1973), *हिन्दी साहित्य का इतिहास*, नई दिल्ली, नेशनल पब्लिशिंग हाउस

7. चतुर्वेदी ,पंकज, (2017), *आत्मकथा की संस्कृति*, नई दिल्ली, वाणी प्रकाशन

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HIND 303 प्रयोजनमूलक हिन्दी

Max. Marks : 100　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　**4　0　0　4**

अपेक्षित परिणाम

1. प्रयोजनमूलक हिन्दी के ज्ञान से प्रशासनिक पदों हेतु सक्षमता बढ़ा पाएँगी।

2. विधिक, तकनीकी, वैज्ञानिक शब्दावलियों के आधार पर भाषाई क्षमता का विकास कर पाएँगी।

3. आधुनिक समय के विभिन्न सामाजिक एवं शासकीय क्षेत्रों में रोजगार के अवसर अर्जित कर पाएँगी।

4. भाषा के विविध रूपों के ज्ञान और व्यावहारिक परिचय से भाषा अधिकारी जैसे पदों हेतु सक्षम बन पाएँगी।

5. पारिभाषिक शब्दावली के अध्ययन के माध्यम से तकनीकी, वैज्ञानिक एवं विधिक आयोगों एवं संबंधित क्षेत्र में स्वतंत्र कार्य करने की क्षमता विकसित कर पाएँगी।

इकाई 1　प्रयोजनमूलक हिन्दी : सिद्धान्त एवं प्रविधि

प्रयोजनमूलक हिन्दी की आवश्यकता,

प्रयोजनमूलक हिन्दी बनाम व्यावहारिक हिन्दी,

प्रयोजनमूलक हिन्दी : स्वरूप और व्याख्या,

प्रयोजनमूलक हिन्दी : विशेषताएँ,

प्रयोजनमूलक हिन्दी के विविध रूप,

प्रयोजनमूलक हिन्दी : सीमाएँ और सम्भावनाएँ

इकाई 2　प्रयोजनमूलक हिन्दी : प्रयुक्ति के माध्यम

भाषा, मानक भाषा, सम्पर्क भाषा, राष्ट्रभाषा, त्रिभाषा सूत्र, राजभाषा, राज्यभाषा

इकाई 3 अनुवाद : सामान्य सिद्धान्त और समस्या

अनुवाद की प्रक्रिया, अनुवाद के प्रकार, समस्याएँ एवं समाधान, कार्यालयी अनुवाद,

अनुवाद : विज्ञान एवं कला, कम्प्यूटर एवं राजभाषा हिन्दी, अनुवाद का महत्व

इकाई 4 पारिभाषिक शब्दावली

शब्द के रूप, परिभाषा, पारिभाषिक शब्दावली की विशेषताएँ, पारिभाषिक शब्दावली के अपेक्षित गुण, पारिभाषिक शब्दावली : निर्माण प्रक्रिया, पारिभाषिक शब्दावली निर्माण के रूप, वैज्ञानिक तथा तकनीकी शब्दावली

इकाई 5 प्रशासकीय शब्दावली के विविध रूप

सरकारी / शासकीय पत्र, अर्द्धसरकारी पत्र, ज्ञापन, कार्यालय आदेश, परिपत्र, अधिसूचना, प्रेस विज्ञप्ति, निविदा सूचना

सहायक पुस्तकें –

1. झाल्टे, दंगल, (2004), *प्रयोजनमूलक हिन्दी : सिद्धान्त और प्रयोग*, नई दिल्ली, वाणी प्रकाशन

2. गोदरे, डॉ. विनोद (1987), *प्रयोजनमूलक हिन्दी*, नई दिल्ली, वाणी प्रकाशन

3. बोस, कमल कुमार (2000), *प्रयोजनमूलक हिन्दी*, नई दिल्ली, क्लासिकल पब्लिशिंग कम्पनी

4. वाजपेयी, डॉ. पुरुषोत्तम (1998), *प्रयोजनमूलक हिन्दी*, कानपुर, चन्द्रलोक प्रकाशन

5. शर्मा, राकेश एवं मिश्र, डॉ. राजेन्द्र (2005), *प्रयोजनमूलक हिन्दी के विविध रूप*, नई दिल्ली, तक्षशिला प्रकाशन

6. मिश्र, डॉ. राजेन्द्र, (2004), *प्रयोजनमूलक हिन्दी और जनसंचार*, नई दिल्ली, तक्षशिला प्रकाशन

7. रत्तू, डॉ. कृष्ण कुमार (2002), *व्यावहारिक हिन्दी नई भाषा संरचना*, नई दिल्ली, नेशनल पब्लिशिंग हाउस

8. भाटिया, डॉ. हरिमोहन (2015), *प्रशासनिक हिन्दी टिप्पण, प्रारूपण एवं पत्र लेखन*, नई दिल्ली, तक्षशिला प्रकाशन

9. भाटिया, डॉ. कैलाशचन्द्र (2017), *प्रयोजनमूलक कामकाजी हिन्दी*, नई दिल्ली, तक्षशिला प्रकाशन

10. गुप्त, डॉ. महेशचन्द्र (2015), *प्रशासनिक हिन्दी : ऐतिहासिक सन्दर्भ*, नई दिल्ली, वाणी प्रकाशन

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http://egyankosh.ac.in/

HIND 308 अनुवाद विज्ञान

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

अपेक्षित परिणाम -

- व्यावहारिक हिंदी के युग में अनुवाद का विशेष महत्व है। इस पाठ्यक्रम के द्वारा अनुवाद विषयक समझ विकसित होगी ।

- रोजगारपरकता की दृष्टि से यह अत्यंत लाभदायक सिद्ध होगा ।

- कंप्यूटर अनुवाद की उपलब्धियों, सीमाओं और संभावनाओं से परिचित होंगी ।

- विश्व–साहित्य की विशिष्ट कृतियों के हिंदी में अनुवादित रूप के अध्ययन से अध्ययन का क्षेत्र व्यापक होगा ।

- विशिष्ट कृतियों को अनुवाद करने में सक्षम होंगी ।

इकाई 1 अनुवाद प्रक्रिया : अनुवाद – स्वरुप, अनुवाद की परिभाषा, स्वरुप और क्षेत्र, अनुवाद कार्य की आवश्यकता व महत्व।

इकाई 2 अनुवाद के प्रकार : शब्दानुवाद, भावानुवाद, छायानुवाद, व्याख्यानुवाद, सारानुवाद, आशु–अनुवाद, आदर्श अनुवाद।

इकाई 3 अनुवाद–प्रक्रिया के तीन चरण : विश्लेषण, अंतरण एवं पुनर्गठन। अनुवाद की भूमिका के तीन पक्ष – पाठक की भूमिका (अर्थग्रहण की) द्विभाषिक की भूमिका (अर्थांतरण की प्रक्रिया) एवं रचयिता की भूमिका (अर्थसम्प्रेषण की प्रक्रिया)।

इकाई 4 अनुवाद और पारिभाषिक शब्दावली : पारिभाषिक शब्दावली के निर्माण के सिद्धान्त, कार्यालय, प्रशासन, विधि, मानविकी, बैंक एवं रेलवे में प्रयुक्त होने वाली प्रमुख पारिभाषिक शब्दावली तथा प्रमुख वाक्यांश के अंग्रेजी तथा हिन्दी रूप।

इकाई 5 विश्वभाषा और अनुवाद : विश्व भाषाओं की प्रमुख कृतियों के हिन्दी अनुवाद एवं हिन्दी की प्रमुख कृतियों के विश्वभाषाओं में किये गये अनुवाद। भारत में अनुवाद प्रशिक्षण के प्रमुख केन्द्र, अनुवाद के राष्ट्रीय प्राधिकरण के गठन की आवश्यकता। हिन्दी अनुवाद का भविष्य।

सहायक पुस्तकें :

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5. तिवारी, भोलानाथ 2011), *अनुवाद विज्ञान–सिद्धांत और प्रविधि,* नई दिल्ली, किताब घर प्रकाशन

6. पालीवाल, रीतारानी (2017), *अनुवाद : प्रक्रिया एवं परिदृश्य,* नयी दिल्ली, वाणी प्रकाशन

7. कुमार, डॉ. सुरेश, (2017), *अनुवाद सिद्धांत की रूपरेखा,* नयी दिल्ली, वाणी प्रकाशन

8. समीर, श्रीनारायण (2017), *अनुवाद की प्रक्रिया : तकनीक और समस्याएं,* इलाहाबाद, लोकभारती प्रकाशन

ई–सामग्री स्रोत –

https://epgp.inflibnet.ac.in/

HIND 307 सर्जनात्मक लेखन के विविध आयाम

Max. Marks : 100　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　**4　0　0　4**

अपेक्षित परिणाम –

- इस पाठ्यक्रम के द्वारा सर्जनात्मक लेखन के विविध क्षेत्र विषयक समझ विकसित होगी ।

- आधुनिक समय के विभिन्न सामाजिक एवं शासकीय क्षेत्रों में रोजगार के अवसर अर्जित कर पाएँगी।

- यथार्थ घटनाओं को संवेदनशील साहित्यिक शैली में प्रस्तुत करने की क्षमता विकसित कर पाएँगी।
- छात्राओं में सर्जनात्मक क्षमता का विकास होगा।

इकाई 1 रिपोर्ताज़ : अर्थ, स्वरूप, रिपोर्ताज एवं अन्य गद्य रूप, रिपोर्ताज और फीचर लेखन–प्रविधि।

इकाई 2 फीचर लेखन : विषय–चयन, सामग्री–निर्धारण, लेखन–प्रविधि। सामाजिक, आर्थिक, सांस्कृतिक, विज्ञान, पर्यावरण, खेलकूद से सम्बद्ध विषयों पर फीचर लेखन।

इकाई 3 साक्षात्कार (इण्टरव्यू/भेंटवार्ती) : उद्देश्य, प्रकार, साक्षात्कार–प्रविधि, महत्त्व।

इकाई 4 स्तंभ लेखन : समाचार पत्र के विविध स्तंभ, स्तंभ लेखन की विशेषताएँ, समाचार पत्र और सावधि पत्रिकाओं के लिए समसामयिक, ज्ञानवर्धक और मनोरंजक सामग्री का लेखन, सप्ताहांत अतिरिक्त सामग्री और परिशिष्ट।

इकाई 5 दृश्य–सामग्री : छायाचित्र, कार्टून, रेखाचित्र, ग्राफिक्स आदि से संबन्धित लेखन, बाजार, खेलकूद, फिल्म, पुस्तक और कला समीक्षा।

सहायक पुस्तकें :

1. झाल्टे, दंगल (2009), *प्रयोजन मूलक हिंदी –सिद्धांत और प्रयोग*, नयी दिल्ली, वाणी प्रकाशन

2. मिश्र, कृष्णबिहारी (2017), *हिंदी पत्रकारिता*, इलाहाबाद, लोक भारती प्रकाशन

3. गोदरे, विनोद (2017), *हिंदी पत्रकारिता : स्वरुप और संदर्भ*, नयी दिल्ली, वाणी प्रकाशन

4. मोहन, रवि (2017), *जनसंपर्क की व्यावहारिक मार्गदर्शिका*, नयी दिल्ली, वाणी प्रकाशन

5. रैना, गौरीशंकर (2017), *संचार माध्यम लेखन*, नयी दिल्ली, वाणी प्रकाशन

6. माणिक, मृगेश (2017), *समाचार पत्रों की भाषा*, नयी दिल्ली, वाणी प्रकाशन

ई–सामग्री स्रोत –

https://epgp.inflibnet.ac.in/

HIND 309 संचार माध्यम और हिन्दी

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

अपेक्षित परिणाम –

- छात्राएँ जनसंचार माध्यमों के स्वरूप, महत्व से परिचित हो सकेंगी।
- भारतीय और पाश्चात्य परिप्रेक्ष्य में संचार की भूमिका को समझ सकेंगी।
- संचार के माध्यम के रूप में हिन्दी पत्रकारिता की भूमिका और उसके प्रभावों को समझ सकेंगी।
- संचार माध्यम के रूप में रेडियो और वर्तमान समय में आकाशवाणी की भूमिका को समझने में सक्षम हो सकेंगी।
- टेलीविजन के विकास के माध्यम से भारत में हुई संचार क्रांति को समझने में समर्थ हो सकेंगी।
- सोशल मीडिया के रूप में वर्तमान समय में सामाजिक और सांस्कृतिक परिस्थितियों को प्रभावी करने वाले कारकों के अभिज्ञान की समझ विकसित हो सकेगी।

इकाई 1 संचार : परिभाषा, स्वरूप और महत्व, संचार के सिद्धांत – भारतीय एवं पाश्चात्य परिप्रेक्ष्य में, संचार के प्रकार – अंतर्वैयक्तिक संचार, समूह संचार एवं जनसंचार।

इकाई 2 संचार माध्यम के प्रकार – पारंपरिक एवं आधुनिक संचार माध्यम, भारत में प्रिंट मीडिया का विकास, स्वतंत्रता पूर्व एवं स्वातंत्र्योत्तर पृष्ठभूमि में प्रिंट मीडिया की भूमिका।

इकाई 3 भारत में इलेक्ट्रानिक मीडिया का विकास, जनसंचार माध्यम के रूप में रेडियो की भूमिका, रेडियो का उद्देश्य, उपयोग एवं महत्व, एफ एम चैनलों की भूमिका और प्रभाव।

इकाई 4 भारत में टेलीविजन का विकास, संचार माध्यम के रूप में टेलीविजन की भूमिका, टेलीविजन का उपयोग, उद्देश्य एवं महत्व, केबल चैनलों के बाद टेलीविजन की भूमिका में आये परिवर्तन।

इकाई 5 संचार माध्यम के रूप में सोशल मीडिया का विकास। वर्तमान परिप्रेक्ष्य में सोशल मीडिया का उद्देश्य, उपयोग एवं भूमिका। सांस्कृतिक एवं सामाजिक परिप्रेक्ष्य में सोशल मीडिया के प्रभाव का अवलोकन।

सहायक पुस्तकें :

1. शर्मा, सतीश, (2017), *संचार माध्यमों की भाषा और हिन्दी*, नई दिल्ली, तक्षशिला प्रकाशन।

2. चंदन, कुमार, (2019), *जनसंचार की हिन्दी का प्रयोजनमूलक स्वरूप,* कानपुर, विद्या प्रकाशन।

3. रैना, गौरीशंकर, (2017) *संचार माध्यम लेखन, नई दिल्ली,* वाणी प्रकाशन।

4. माणिक, मृगेश, (2017), *समाचार पत्रों की भाषा, नई दिल्ली,* वाणी प्रकाशन।

5. मिश्र, उन्मेष, (2019), *दूरदर्शन का स्वरूप एवं हिन्दी प्रस्तुतिकरण,* कानपुर, विद्या प्रकाशन।

6. गोहिल, मनीषा, (2019), *मीडिया और हिन्दी भाषा का स्वरूप, कानपुर,* विद्या प्रकाशन।

7. जोशी रामशरण, (2009), *मीडिया विमर्श,* नई दिल्ली, सामयिक प्रकाशन।

8. भारद्वाज, नंद, (2009), *संस्कृति, जनसंचार और बाजार,* नई दिल्ली, सामयिक प्रकाशन।

9. लाल, बंशीधर, *भारतीय स्वतंत्रता और हिन्दी पत्रकारिता,* पटना, ग्रंथ कुटीर, राजपथ।

10. दुबे, राजीव, *हिन्दी पत्रकारिता और राष्ट्रीय आंदोलन,* सत्येंद्र प्रकाशन।

HISTORY
First Semester

HIST 101 History of Early India (upto Mauryan Age)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Sources: Archaeological and Literary. An outline of early Paleolithic, Mesolithic, Neolithic and Chalcolithic settlements.

Unit 2 Harappan urbanization; economic processes. Vedic Age: emergence of monarchy; religion and ritualism; social stratifications and economic expansion during later Vedic age.

Unit 3 Birth and Growth of Magadhan Empire; 2nd Urbanization: Emergence of historical cities; crafts and guilds. Jainism and Buddhism, teachings and contribution.

Unit 4 Conquests of Mauryan Kings; Nature and Structure of Mauryan empire; Asoka and Dhamma; South India during Sangam Age.

Unit 5 Decline of Mauryan Empire; Society and Economy; Characteristics of Mauryan Arts.

Learning Outcomes: After the completion of the course, students will be able to:

- Comprehend different types of sources of early Indian history
- Be acquainted with trends of political developments in early India
- Orient themselves to continuity of cultural evolution beginning from the Lithic Ages
- Familiarise themselves with regional and Indian stylistic development of aesthetics

Recommended Books:

1. Basham, A.L. (2004 rprnt). *The Wonder that was India*. England: Picador. (Also in Hindi)

2. Chakravarti, Ranveer. (2014). *Bharatiya Itihasa ka Aadikal: Prachintam Parva se 600 tak*. Delhi: Orient Blackswan. (Hindi)

3. Jha, D.N., Shrimali, K.M. (2013). *Prarambhik Bharat ka Itihasa*, Delhi: Delhi University Hindi Medium Directorate. (Hindi)

4. Sharma, R.S. (2018). *History of Early India*, Delhi: OUP (Also in Hindi)

5. Sharma, R.S. (2015). *History of Early India*, Delhi: Orient Blackswan. (Also in Hindi)

6. Singh, Upinder. (2009). *A History of Ancient and Early Medieval India from the Stone Age to the 12th Century*. Delhi: Pearson.

7. Srivastava, K.C. (2010), *Prachin Bharat ka Itihas tatha Sanskriti*, Delhi: United Book Depot. (Hindi)

8. Thapar, R. (1990). *History of India*, Vol. I. Delhi: Oxford. (Also in Hindi)

9. Tripathi, R.S. (1992). *History of Ancient India*, Delhi: Motilal Banarasidas. (Also in Hindi)

Suggested E-Resources:

- Thapar, Romila. (1968). Interpretations of Ancient Indian History. *History and Theory*, Vol. 7, No. 3 (1968), pp. 318-335. Retrieved from

  https://www.jstor.org/stable/pdf/2504471.pdf?refreqid=search%3Abdbccade787ce27a66ca43458df52d0d

- Childe, Vere Gordon. (1944). *The Story of Tools*. London: Cobbett Publishing. Retrieved from https://www.marxists.org/archive/childe/1944/tools/childetools.htm

- Romila Thapar, Kunal Chakrabarti and Geeti Sen. (2004). Interpretations of Indian History. *India International Centre Quarterly*. Vol. 31, No. 2/3. Retrieved from

  https://www.jstor.org/stable/pdf/23006218.pdf?refreqid=search%3Abdbccade787ce27a66ca43458df52d0d

HIST 103 History of Medieval India (1000 to 1526 AD)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Unit 1 An Outline of Sources of Sultanate Period; Political and social condition of Northern India on the eve of Muslim invasions; Impact of Turkish invasions; Causes of the defeat of Rajputs; Achievements of Qutubuddin Aibak.

Unit 2 Iltutmish as real founder of Delhi Sultanate; Consolidation under Balban and his theory of kingship; Allauddin Khilji's market control policy and Deccan Policy.

Unit 3 Projects of Mohammad Bin-Tughlaq; Administration of Feroz Tughlaq; Afghan Theory of Kingship; Disintegration of the Delhi Sultanate; Emergence of Regional Powers- Vijaynagar and Bahamani Empire.

Unit 4 Urbanization under Delhi Sultanate; Trade and Commerce in Sultanate period; Social life in the age of Sultanate.

Unit 5 Sultanate Architecture with special reference to Qutub Complex; Sufism – Features and Importance; Salient features of Bhakti Movement.

Learning Outcomes: After the completion of the course, students will be able to:

- Define the struggling phase of an era of transformation in medieval India.
- Understand the advent of Islam and role of the Sultanate in the development of new political system and policies in India.
- Identify how the disintegration of an empire leads to the rise of regional powers.
- Comprehend technical developments and socio-cultural relation of two different societies.

Recommended Books:

1. Bhargav, M. (2010). *Exploring Medieval India, Sixteenth to Eighteenth Centuries: Culture, Gender and Regional Patterns*. Delhi: Orient Black Swan.

2. Chandra, S. (1999). *Medieval India: From Sultanate to the Mughals, Part I*, Delhi Sultunate (1205-1526). New Delhi: Haranand Publishers.

3. रिजवी, एस.ए.ए.. (2005). *खलजीकालीन भारत. तुगलककालीन भारत.* नई दिल्ली: राजकमल प्रकाशन.

4. Habib, Irfan. (2008). *Technology in Medieval India*. Delhi: Tulika Publication.

5. Habib, Irfan. (2007). *Medieval India: The Study of Civilization.* Delhi: NBT.

6. Habibullah, A.B.M. *The Foundation of Muslim Rule in India.* Allahabad: Central Book Depot.

7. Mukhia, H. (2001). *Madhyakaleen Bharat: Naye Aayam*. Delhi: Neha Publishers.

8. चंद्र, सतीश. (2007). *मध्यकालीन भारत राजनीति, समाज और संस्कृति.* नई दिल्ली: ओरियेण्ट लोंगमैन.

Suggested E-resources:

- Disintegration of the Delhi Sultanate and Rise of Provincial Kingdoms. Retrieved from www.historydiscussion.net›...›Disintegration› of Delhi Sultanate.https://archive.org

- The Qutb Complex: An Overview. Retrieved from https://www.sahapedia.org/the-qutb-complex-overview.

- Urban Centers and Population during the Sultanate and Mughal Period. Retrieved from www.yourarticlelibrary.com/mughals/the-urban-development-in...the-mughal.../4348

Second Semester

HIST 102 History of India (200 BC to 1000 AD)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Rise of new powers: Shungas - Pushyamitra; Saka Kshatrapas in Western India -Rudradaman; Kushanas - achievements of Kanishka; Satavahanas in Deccan- Gautamiputra Satakarni.

Unit 2 India during 200 BC to 300 AD: (i) Growth of Cities, Crafts and Guilds (ii) Social transformations (iii) Beginnings of Religious Architecture and Sculpture.

Unit 3 Imperial Guptas: Rise of Guptas; Samudra Gupta's conquests; Administrative Structure; Achievements of Chandragupta; Religious Achievements of Harsha Vardhan.

Unit 4 India during 400 AD to 600 AD: Patterns of trade and commerce; Development of Science and Technology; Artistic achievements; Patterns of Religious Developments.

Unit 5 Origin of the Rajputs; System of Land grants and their impact; Importance of Pallava, Chalukya, Chola powers; Expansion of Indian Culture in South-East Asia.

Learning Outcomes:

After the completion of the course, students will be able to:

- Visualize rise of imperial, regional and Rajput powers in ancient India.
- Assess the consolidation of foreign powers on Indian soil.
- Comprehend Indian social transformations in early Christian centuries.
- Understand overseas expansion of Indian culture.

Recommended Books:

1. Basham, A.L. (2004 rprnt). *The Wonder that was India*. England: Picador. (Also in Hindi)

2. Chakravarti, Ranveer. (2014). *Bharatiya Itihasa ka Aadikal: Prachintam Parva se 600 tak*. Delhi: Orient Blackswan. (Hindi)

3. Jha, DN, Shrimali, K.M. (2013) *Prarambhik Bharat ka Itihasa*, Delhi: Delhi University Hindi Medium Directorate. (Hindi)

4. Sharma, R.S. (2015). *History of Early India*, Delhi: Orient Blackswan. (Also in Hindi)

5. Sharma, R.S. (2018). *History of Early India*, Delhi: OUP (Also in Hindi)

6. Singh, Upinder. (2009). *A History of Ancient and Early Medieval India from the Stone Age to the 12th Century*. Delhi: Pearson.

7. Srivastava, K.C. (2010), *Prachin Bharat ka Itihas tatha Sanskriti*, Delhi: United Book Depot. (Hindi)

8. Thapar, R. (1990). *History of India*, Vol. I. Delhi: Oxford. (Also in Hindi)

9. Tripathi, R.S. (1992). *History of Ancient India*, Delhi: Motilal Banarasidas. (Also in Hindi)

Suggested E-Resources:

- Desai, Devangana, Social Dimensions of Art in Early India, *Social Scientist*, Vol. 18, No. 3 (Mar., 1990), pp. 3-32. Retrieved from

  https://www.jstor.org/stable/pdf/3517423.pdf?refreqid=search%3A 16df57599d47b575a74d74c1f53d2fb1

- Shastri, Ajay Mitra. (2001) Formative Phase of the Western Deccan Sātavāhanas and Ksaharātas: Achronological Review. *Annals of the Bhandarkar Oriental Research Institute*, Vol. 82, No. 1/4. pp. 57-72. Retrieved from https: // www. jstor. org / stable /pdf /41694631. pdf? refreqid = search % 3A7c2f3965ed1d0d94ca 40bd2b1b1f1df3

HIST 104 History of Medieval India (1526 to 1707 AD)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Unit 1 An Outline of Sources of Mughal Period; Babar's establishment of Mughal rule in India; Humayun's struggle against the Afghans; Administration of Shershah; Akbar's relations with Rajputs; Religious Policy of Akbar.

Unit 2 Aurangzeb and Rajput relations; Religious policy of Aurangzeb; Mughals' Deccan policy; Formation of Maratha State.

Unit 3 Central and Provincial administration under the Mughals; Revenue system under the Mughals; Mansabdari System; Jagirdari System.

Unit 4 Urbanization during Mughal rule; Industries in North India; Trade and Commerce during Mughal age; Social structure under the Mughals.

Unit 5 Main features of Mughal School of Painting – Golden period of Jahangir; Development of Mughal Architecture - Fatehpursikri and Tajmahal.

Learning Outcomes: After the completion of the course, students will be able to:

- Appreciate significance of composite culture.
- Understand Mughal policies, administrative system and their military establishment.

- Elaborate the growth of economic institutions and social change in medieval age.

- Define the significance of Mughal rulers as they established a new empire in India, its relation with the Central Asian empires, the commercial and cultural relations between India, China and Europe.

Recommended Books:

1. Bhargav, M., (2010). *Exploring Medieval India, Sixteenth to Eighteenth Centuries: Culture, Gender and Regional Patterns*. Orient Black Swan, First edition.

2. Chandra, S., (2007). *History of Medieval India*. New Delhi: Orient Black Swan.

3. Chandra, S., (1999). *Medieval India, Part II, Mughal Period*. New Delhi: Haranand Publishers.

4. Habib, I., (2007). *Medieval India: The Study of civilization*. Delhi: NBT.

5. Richards, J.F., (2001). *The Mughal Empire*. Cambridge University Press.

6. वर्मा, हरिशचंद्र. (2008). मध्यकालीन भारत (1540–1761 ई.). दिल्लीः हिन्दी माध्यम कार्यान्वयन निदेशालय.

7. चंद्र, सतीश. (2004). मुगलों की धार्मिक नीतियाँः राजपूत समुदाय एवं दक्षिण. नई दिल्लीः वाणी प्रकाशन.

Suggested E-resources:

- K. N. Chaudhuri. Some Reflections on the Town and Country in Mughal India. Retrieved from *https://www.jstor.org/stable/311823*

- The Mughal Period Boundless Art History. Retrieved from http//course.lumenlearning.com

Third Semester

HIST 202 Political History of Modern India (1757 to 1947)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 A) Decisive Battles: Battle of Plassey (1757); Third Battle of Panipat (1761); Battle of Buxar (1764).

B) Policies: Policy of Non-intervention; Subsidiary Alliance; Doctrine of Lapse.

Unit 2 Important Acts and their features: A) Regulating Act 1773; Charter Act of 1833. B) Indian Council Act 1909; The Government of India Act 1919; The Government of India Act 1935.

Unit 3 Landmark Events: Nature of 1857 Formation of Indian National Congress and Safety Valve theory; Foundation of Muslim League and its Objectives; Partition of Bengal; Nature of the Tribal and Peasant Resistance Role of Capitalist Class in Freedom Struggle.

Unit 4 Movement; Gandhi's Non-Violent Movements: Non-Cooperation, Civil Disobedience and Quit India Movements.

Unit 5 The Independence: Cabinet Mission; Mountbatten Plan; India Independence Act 1947; Partition of India

Learning Outcomes: After the completion of the course, students will be able to:

- Develop critical thinking about the political impact of British Raj.
- Understand how India got independence with partition.
- Evaluate the structure of British administrative system.
- Locate the nature of various peasant, tribal movement and the discourse on 1857 event.

Recommended Books:

1. Chandra, B. (1996). *India's Struggle for Independence 1857-1947*. Delhi: Penguin.

2. Desai, A.R. (1979). *Peasant Struggles in India*. Bombay: Oxford University Press.

3. Fisher, M. H. (1999). *The Politics of the British Annexation of India, 1757-1857*. Delhi: Oxford University Press.

4. Grover, B. L. & Yashpal. (2000). *Advanced Study of the History of Modern India*. Delhi.

5. Prasad, B. *Bondage and Freedom (1858-1947)* Vol. II. New Delhi: Rajesh Publications.

6. Sarkar, S. (1998). *Modern India 1885-1947*. Delhi: Macmillan.

7. रॉबर्ट्स, पी. ई. (1974). ब्रिटिश कालीन भारत का इतिहास, एस. चंद एण्ड कं. लिमिटेड, दिल्ली.

8. शुक्ल, रामलखन. (1998) आधुनिक भारत का इतिहास, दिल्ली विश्वविद्यालय, हिन्दी निदेशालय, दिल्ली.

Suggested E- Resources:

- *The Eighteenth Century Debate*. Retrieved from

  http://egyankosh.ac.in/youtubevideo.jsp?src=gHbBoCveEgo&title=The%20Eighteenth%20Century%20Debate-1

- Harriet, Martineau. *British Rule in India*. Retrieved from https://archive.org/

HIST 203 Social and Economic History of Modern India (1707 to 1947)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Historical Debate on the Eighteenth Century India: Socio-Economic Situation; British understanding of Indian Society: Orientalist, Utilitarians and Evangelical; Nature of Social Reform Movements: the Acculturative and Transitional.

Unit 2 The development of Modern Education: Orientalist - Anglicist Controversy, Charles Woods Despatch; The rise of Middle Class; Science and the Raj: the Emergence of Colonial and National Science.

Unit 3 Agricultural Transformation under Colonial rule: Permanent Settlement, its Operation and Effects; Ryotwari and Mahalwari Land Settlement: Operation and Effects; Famine Policy and the Raj.

Unit 4 Nationalist Critique of Colonial Economic Policy: Dadabhai Naoroji and the Drain of Wealth; Debates on Deindustrialization and the Decline of Handicrafts; The Imperial Steam: Railways and its Impact.

Unit 5 The Development of Industries: the Cotton Textile Industry; Jute Industry; the Development of Banking System.

Learning Outcomes: After the completion of the course, students will be able to:

- Develop the critical thinking about the colonial &exploitative character of British Raj.

- Locate the history of education, profession and institutionalization of knowledge.

- Evaluate the nature of socio-religious movement in modern India and write an assignment on the same.

- Understand the recent trends of historiography on science, technology, and environment**.**

Recommended Books:

1. Bagchi, A. (2010). *Colonialism and Indian Economy.* Oxford University Press.

2. Bandyopadhyay, S. (2004). *From Plassey to Partition: A History of Modern India.* New Delhi: Orient Blackswan.

3. Bhatia, B. M. (1991). *Famines in India: A study in some aspects of the Economic History of India with special reference to Food Problem*, *1860-1990*. Konark Publishers.

4. Bhattacharya, S. (1990). *Aadhunik Bharat ka Aarthik Itihas*. Delhi: Rajkamal Prakashan.

5. Kumar, Deepak. (1995). *Science and the Raj 1857-1905*. Oxford University Press.

6. Marshall, P. J. (2005). *The Eighteenth Century in Indian Hist*ory. Oxford University Press.

7. Rao, M.S.A. (1978). *Social Movements in India*, Vol. I and Vol. II. Delhi: Manohar.

8. Roy, Tirthankar. (2000). *The Economic History of India 1857-1947*. Oxford University Press.

9. Shukla, R. L. (ed) (1998). *Aadhunik Bhart ka Itihas*. Delhi: Hindi Madhyam Karnvyan Nideshayalaya).

Suggested E- Resources:

- Ghosh, Suresh Chandra. The Genesis of Curzon's University Reform: 1899-1905. Retrieved from

- Naoroji, D. Poverty and Un-British Rule in India. Retrieved from
  https://archive.org/details/povertyandunbri00naorgoog/page/n6
- Premchand. Godaan. Retrieved from
  https://www.youtube.com/watch?v=3ZwcFPLHoUc

Fourth Semester
HIST 201 Civilizations of the World

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Concepts of Civilization, Difference between Civilization and Culture; Mesopotamian Civilization- Growth of Urbanization, Art; Babylonian Civilization- Code of Hammurabi, Religion and Philosophy.

Unit 2 Egyptian Civilization- Architecture and Sculpture; Mathematics and Science; Chinese Civilization - Religion and Philosophy; Art, Architecture and Science.

Unit 3 Persian Civilization - Economic and Social life, Religion, Art and Culture; The Greek Civilization- Literature and Philosophy; Roman Civilization- Laws and Government, Rise of Roman Imperialism.

Unit 4 Importance of American Civilization – The Mayas, Aztecs and the Incas; Origin of African Civilization – The Kingdom of Kush, Nubia and Sudanic.

Unit 5 Rise of Judaism and Christianity; Birth of Islam- Emergence of Crusades.

Learning Outcomes: After the completion of the course, students will be able to:

- Know about the early world civilizations.
- Analyze the contribution of world civilizations in the field of science, art and architecture.
- Discuss the literary and philosophical achievements of the Greeks.
- Understand rise of Judaism, Christianity, Islam and emergence of the crusades.

Recommended Books:

1. Davies, H.A. (2007). *An Outline History of the World*. Oxford University Press.

2. Durant, Will, Simon and Schuster. (1942). *The Story of Civilization*, *Our Oriental Heritage*. Part-I. New York.

3. Durant, Will. (1950). *The Story of Civilization, The Age of Faith*. Part IV. New York.

4. Goyal, Shriram. (2007). *Vishwa ki Prachin Sabhyatayen.* Varanasi: Viswavidyalaya Prakashan.

5. Piotrovsky, B. & Gregory, B.L. (1988). *Ancient Civilization of East and West*. Moscow: Progress Publishers.

6. Simone & Schuster. *Outline History of the World*. Vol. I and II. Jaipur: Arihant Publishers.

7. Swain, J.E. (1970). *A History of World Civilization*. New Delhi: Eurasia Publishing House.

8. Watton, Linda & Goucher, C. (2013). *World History Journeys from Past to Present*. London: Routledge.

Suggested E-Resources:

- History of civilization. *HistoryWorld.net.*

  http://www.historyworld.net/wrldhis/PlainTextHistories.asp?historyid=ab25

- World Civilization and World History

  https://courses.lumenlearning.com/suny-coursesupport/chapter/world-civilization-and-world-history

- W.Winks, Robin. World Civilizations: A Brief History. https://www.amazon.com/World-Civilization-Robin-W-Winks/dp/0939693283

HIST 204 Survey of the History of Rajasthan

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Main Sources of the History of Rajasthan. Janapads of Rajasthan with special reference to Matsya and Malava; Chauhan Empire with special reference to Prithvi Raj III.

Unit 2 Resistance to the Khilji's imperialism with special reference to Chittor and Ranthambhor; Rajputs Alliances with the Mughals and resistance of Maharana Pratap.; Sawai Jaisingh and Maratha intervention in Rajasthan.

Unit 3 Treaties with the East India Company with special reference to Kota and Jaipur; Rajasthan's Role in 1857; Nature of Peasant, Tribal and Prajamandal movements; Stages of formation of the State of Rajasthan (1948-56).

Unit 4 Religious movements in Medieval Rajasthan with special reference to Dadu and Vishnoi sects; Impact of Modern Education on Rajasthan.

Unit 5 Characteristics of Rajput Architecture with special reference to Chittorgarh and Amer. Main features of Rajasthani painting.

Learning Outcomes: After the completion of the course, students will be able to:

- Recognise the importance of regional history in Indian History.
- Describe the political and cultural developments of Rajasthan.
- Assess the resistance and collaboration of Rajput rulers towards imperial powers.
- Analyse the emergence of socio-religious, tribal, peasant and prajamandal movements.

Recommended Books:

1. Sharma, Dasharath. (1966). *Rajasthan through the Ages*, Vol. I. Bikaner: Rajasthan State Archives.
2. Sharma, G. N. (1968). *Social History of Medieval Rajasthan (1500-1800 A.D.)*. Agra: Shivlal Agarwal.
3. Sharma, K.G. (2014). *History and Culture of Rajasthan*. Jaipur: Center For Rajasthan Studies.
4. Shukla, D.C. (1978). *Early History of Rajasthan*. Varanasi: Bhartiya Vidya Prakashan.
5. नीरज, जयसिंह. (1994). *राजस्थानी चित्रकला*, जयपुर :राजस्थान हिन्दी ग्रंथ अकादमी.
6. देवड़ा, जी.एल. (2005). *राजस्थान इतिहास के अभिज्ञान रूप*, जयपुरः राजस्थान हिन्दी ग्रंथ अकादमी.
7. गुप्ता, के. एस. एवं जमनेश, ओझा. (2012). *राजस्थान के इतिहास का सर्वेक्षण*, जयपुरः लिटरेरी सर्किल.
8. शर्मा, गोपीनाथ (2014). *राजस्थान का इतिहास*, आगराः शिवलाल अग्रवाल.

Suggested E-Resources:

- Beach, Milo Cleveland. (1975). The Context of Rajput Painting. *Ars Orientalis*.

Retrieved from https://www.jstor.org/stable/4629279?seq=1# metadata_info_tab_contents

- Mathur,M.M. (2008). Glorious Mewar, *Bulletin of the Deccan College Research Institute*. Retrieved from
  https://www.jstor.org/stable/42931212?seq=1#metadata_info_tab_co ntents

- Tiwari, Arya Ramchandra G. (1960). Some Gaps in the History of Rajasthan. *Proceedings Of The Indian History Congress*. Retrieved from

- https://www.jstor.org/stable/44137537?seq=1#metadata_info_tab_co ntents

Fifth Semester

HIST 301 Changing Patterns of World History

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 The Development of the Ideas of Humanism and Liberalism: Renaissance and Reformation; Industrial Revolution.

Unit 2 The development of Nationalism: The War of American Independence; French Revolution; Unifications of Italy and Germany

Unit 3 Significance of Modernization of Japan; Ottoman Empire and Tanzimat Reform, Chinese Revolution, 1911; Bolshevik Revolution 1917.

Unit 4 Repercussions of Imperialism: First World War; Totalitarianism in Italy and Germany, Second World War.

Unit 5 Post War Effects: Economic Depression 1930; Establishment of United Nations Organization and Rise of Internationalism.

Learning Outcomes: After the completion of the course, students will be able to:

- Critically analyze/interpret primary documents/secondary sources; qualitative/ quantitative data to evaluate historical events.

- Develop communication skills through oral/written exercises, and develop analytical skills by critically interpreting historical events.

- Analyze how local/national/international policies/practices developed in the past continue to impact their contemporary lives.

- Understand the establishment of United nations Organization.

Recommended Books:

1. Baycroft, Timothy. (1998). *Nationalism in Europe 1789-1945.* Cambridge University Press.

2. Carr, E.H. *International Relations between Two World Wars.* Palgrave.

3. Gupta, Parthasarthi. (1983). *Aadhunik Paschim ka Uday.* Delhi: Hindi Madhyam Karnvyan Nideshalaya.

4. Hobsbawm, Eric. (1970). *Nation & Nationalism.* Cambridge.

5. Jain and Mathur. (2005). *An Outline of Modern World History.* Jaipur: Jain Publishers.

6. Swain, J. E. (1992). *A History of World Civilization.* Delhi: Eurasia Publishing House.

7. Taylor, A. J. P. (1996). *The Origins of the Second World War.*

8. Todd, Allen. (1998). *Revolutions 1789-1917: Cambridge Perspectives in History Series.* UK.

Suggested E-Resources:

- First World War.Com, https://www.firstworldwar.com/.

- Grudin, Robert, Humanism, https://www.britannica.com/topic/humanism.

Sixth Semester

HIST 302 Introduction to Historiography

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1 (i) Meaning and concept of History.

(ii) History – an art or a science.

Unit2 (i) Reconstruction of Past: Primary and Secondary Sources.

(ii) History and its Relationship with other Social Sciences.

(iii) Use and Understanding of History.

Unit 3 A Brief Outline of - (i) Subaltern History; (ii) New History; (iii) Gender History.

Unit 4   Theories of History - (i) Linear History; (ii) Cyclical Theory; (iii) Great – Man Theory.

Unit 5   (i) Chronology in History; (ii) Archaeological Techniques-Exploration and Excavation; (iii) Dating Methods in History.

Learning Outcomes: After the completion of the course, students will be able to:

- Develop a critical thinking with regard to the genesis and nature of the discipline.

- Understand the recent developments in gender history, new history and archaeological techniques.

- Locate the philosophy of history in terms of cyclical, linear and great men theory.

- Read and write a paper related to the fundamental question- what is history.

Recommended Books:

1. Ali, B. Sheik. (1978). *History: its Theory and Method*. Madras, NY: Macmillan.

2. Bajaj, S.K. (1987). *History: Its Philosophy, Theory and Methodology*. Patiala.

3. Carr, E.H. (1967). *What is History*. NY: Penguin Books.

4. Collingwood, R.G. (1951). *The Idea of History*. Oxford.

5. Sreedharan, E. (2009). *A Textbook of Historiography 500 BC to AD 2000.* Delhi, NY: Orient BlackSwan.

6. Stern, F. (ed.). (1956). *The Varieties of History*. New York.

Suggested E-Resources:

- Anders, Schinkel. History and Historiography in Process. Retrieved from

  https://www.jstor.org/stable/pdf/3590742.

- Herodotus. The Battle of Thermopylae (from *histories*). Retrieved from

  https://www.youtube.com/watch?v=y_Q1T1ExaMQ

- Ranajit Guha. *The Small Voice of History*. Retrieved from https://archive.org/details/in.ernet.dli.2015.149176

Discipline Electives

HIST 303 Tracing Women's History in Indian Society

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

Unit 1   Role of women in the rise of early civilizations; Cult of Mother Goddess; Pursuits of women in Vedic economy.

Unit 2   Expansion of activities during Mauryan times; Institutionalization and position of public women in ancient India; Position of Women as described in Buddhism and Jainism.

Unit 3   Life in Royal Harem and Janani Deorhi in Medieval Period; Profiling cultural and commercial life of women; Women's agency and role in religious movements.

Unit 4   Debating the women under colonial rule; Educating the women and rise of new professions; Pandita Ramabai and Sarojini Naidu.

Unit 5   Rise of women's organizations with special reference to AIWC; Women in Nationalist and Revolutionary movements; Women's movements in Post-independent India.

Learning Outcomes: After the completion of the course, students will be able to:

- Locate the progress of civilization and subsequent changes in position of women.
- Interpret Women's status through Buddhist and Jaina texts.
- Assess women's contribution towards making of medieval Indian culture.
- Analyze Women's participation in national movement.

Recommended Books:

1. Chaturvedi, Heramb. (2014). *Dastan Mughal Mahilao Hasiye se Savarta Samanantar Itihas*. Delhi: Lok Bharti Prakashan.

2. Forbes, Geraldine. (2004). *Women in Modern India*. Delhi: Cambridge University Press.

3. Kumar, Radha. (1993). *The History of Doing: An Illustration Account of Movement for Women's Rights and Feminism in India, 1800-1900*. Delhi: Zubaan (Kali for Women).

4. Lal, Ruby. (2005). *Domesticity and Power in early Mughal's World*. Cambridge.

5. Mishra, Rekha. (1967). *Women in Mughal India (1526-1748)*. Delhi: Munshiram Manoharlal.

6. Mukherjee, Soma. (2001). *Royal Mughal Ladies and their Contributions*. Delhi: Gyan Publication.

7. Mullatti, Leela. (1989). *The Bhakti Movement and the Status of Women: A case study of Virsaivism*. Delhi: Abhinav Publication.

8. Roy, Kumkum. (2001). *Women in Early Indian Societies*. New Delhi: Manohar.

Suggested E-Resources:

- Marie, McKeown. Women through History: Women's Experience Through the Ages**.** Retrieved from https://owlcation.com/humanities/Greatest-Indian-Women-From-History

- https://www.naaree.com/five-great-women-history-ancient-india

HIST 306 Fundamentals of Indian Society and Culture

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Unit 1   **Understanding Culture**: Plurality and Multiculturalism in Indian Society;

Social Institutions: Evolution of Varna, Caste and Family.

Unit 2   **Vedic Schools of** Philosophy (An outline): Samkhya, Yoga, Vaisesika, Nyaya, Mimamsa, Vedanta;

Shramnic Schools of Philosophy (An outline):   Jainism, Buddhism.

Unit 3   **Artistic Heritages**: Buddhist Stupa; Temple Architecture; Cave Paintings;

Synthesis through Art: Indo-Islamic Architecture; Performing and Visual Arts

Unit 4 **Development of Educational Institutes**: Nalanda; Firangi Mahal; Visva Bharati;

      Literary Traditions: Kalidas; Kabir; Premchand.

Unit 5 **Science in Pre-Colonial India**: Contribution of Aryabhatta and Charak; Military Technology in Medieval times; Raman Effect; **Science in Independent India**: Green Revolution; ISRO, HJ Bhabha and APJ Abdul Kalam.

Learning Outcomes: After the completion of the course, students will be able to:

- Understand the evolution of Indian society and culture.
- Analyse the philosophy of Indian thought process.
- Explore the Indian contribution to the field of science and education.

Recommended Books:

1. Chattopadhyay, D.P. (1986). *Indian Philosophy*. New Delhi: Popular Publishing House.
2. Gupta, S. K. and Kamalnayan. (2005). *Bharatiya Sanskriti ke Muladhar*. Jaipur: College Book House.
3. Jayapalan, N. (2001). *A History of Indian Culture*. Delhi: Atlantic.
4. Nehru, J. L. (2002). *Discovery of India.* Delhi: Penguin.
5. Prabhu, P. H. (1979). *Hindu Social Organization*. Bombay: Popular Prakashan.
6. Raza, Moonis. ed. (1961). *Introducing India*. Aligarh: Aligarh Muslim University.
7. Sen, Amartya. (2005). *The Argumentative Indian*. New Delhi: Penguin.
8. Qaisar, Ahsan Jan (1982). *The Indian Response to European Technology and Culture*, 1498-1707. Delhi : Oxford University Press.
9. गुप्ता, एस. के. और कमलनयन. (2005). *भारतीय संस्कृति के मूलाधार*, जयपुर, कॉलेज बुक हाउस.

Suggested E-Resources:

- Mookerjee, R. K. 'Ancient Indian Education',

  https://archive.org/details/in.ernet.dli.2015.216828/page/n7

- Menon, M.G.K. 'An Extraordinary Indian', https://www.jstor.org/stable/pdf/23006442.pdf?refreqid=excelsior%3A8a9547d999a27d90bc9e3f4ee6caa972.

- Shrivastava, Nripendra Kumar. 'Indo-Islamic Medical Tradition: A Move Towards Synthesis During the Delhi Sultanate Period'. https://www.jstor.org/stable/pdf/44146747.pdf.

HIST 307 Trends in the Understanding of History

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1 Annals School; Quantitative History; Environmental History

Unit 2 Folklore and Oral History; Cinema and Society; Literature and History

Unit 3 Regional History; Diaspora Studies; sports history

Unit 4 Postmodernism; Debates on the End of history

Unit 5 Writings on Indian Nationalism: Imperialist, Nationalist and Marxist School.

Learning Outcomes: After the completion of the course, students will be able to:

- Understand key philosophical development of 20th century.

- Develop idea about the social history.

- Develop a critical thinking with regard to the oral history and quantitative techniques.

- Discuss the various eminent historians and the new historical trends.

Recommended Books:

1. Brudel, F. (1972). *The Mediterranean and the Mediterranean World in the Age of Philip II*, in 2 vols.

2. Febvre, Lucien & Martin, H.J. (1976). *The Coming of the Book: The Impact of Printing 1450-1800*. London: New Left Books.

3. Foucault, Michel. (2002). *Archaeology of Knowledge*. Routledge.

4. Fukuyama, F. (1992). *The End of History and the Last Man*. Free Press.

5. Guha, R. (1982). *Subaltern Studies*, Vol. I. NY: Oxford University Press.

6. Kumar, Sanjeev H. M. (2013). Constructing the Nation's Enemy: Hindutva, popular culture and the Muslim 'other' in Bollywood cinema. *Third World Quarterly*, 34:3.

7. Prasad, M. (1998). *Ideology of Hindi Film: A Historical Construction*. Delhi: Oxford University Press.

8. White, Hayden. (1973). *Meta History: The Historical Imagination in Nineteenth-century Europe*: John Hopkins University.

Suggested E- Resources:

- Cliometrics or the Quantitative Projection of Social Sciences in the Past, Claude Diebolt. Retrieved from https://www.jstor.org/stable/20762195?Search=yes&resultItemClick=true&searchText= 2

- Schinkel, Anders. History and Historiography in Process. Retrieved from https://www.jstor.org/stable/pdf/3590742.pdf**.**

HIST 305 An Outline of the History of South India

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		4	0	0	4

Unit 1 (i)   South Indian History: Archaeological and Literary Sources.

(ii) The Cultural Contact between North and South India

(iii) The Satavahanas: Importance in South Indian History

Unit 2 (i)   The Sangam Age: Development of Religious and Social Institutions

(ii) The Emergence of New Dynasties: Chalukya of Badami, Pallava & Pandya

(iii) The dominance of Chola Empire

Unit 3 (i)   Rashtrakutas: Religion & Society

(ii) Chalukyas of Kalyani: Social and Religious life

(iii) Administrative & Military Reforms of Cholas

Unit 4 (i) Vijayanagar and Bahmani Empires: Origin & Development

(ii) Vijayanagar Administration: The Nayaka System

(iii) Cultural life in Vijayanagar.

Unit 5 (i) An outline of Dravidian Style of Architecture

(ii) Main features of Chalukyan Temple architecture

(iii) Rock Cut Temple Architecture: Pallava and Rastrakuta Contributions

Learning Outcomes: After the completion of the course, students will be able to:

- Familiarize themselves with contributions of South Indian dynasties to Indian History.
- Understand dynamics of socio-economic life in South India.
- Assess the evolution of South Indian Art & architecture.

Recommended Books:

- Sastri, K.A.N. (2010). *History of South India*. London: Oxford University Press.
- Karashima, Noboru. (2014). *A Concise History of South India: Issues and Interpretations*. New delhi: Oxford University Press.
- Veluthat, Kesavan. (2010) . *The Early Medieval in South India*. New Delhi: Oxford University Press.
- Altekar, A.S. (1967). *Rastrakutas and their times*. London: Orient Book Agency.
- Stein, Burton. (1989). *The New Cambridge History of India: Vijayanagara*.I.2.Cambridge: Cambridge University Press.
- Subbarayalu, Y. (2011). *South India under the Cholas*. New Delhi: Oxford University Press.
- गोयल, एस. आर. (1995). *दक्षिण का इतिहास.* जोधपुर : कुसुमांजली प्रकाशन.
- तिवारी, मारूतिनंदन और कमलगिरि. (1991).*मध्यकालीन भारतीय मूर्तिकला.* वाराणसीः विश्वविद्यालय प्रकाशन.
- वर्मा, हरिशचंद्र. (2008). *मध्यकालीन भारत (750–1540 ई.).* दिल्लीः हिन्दी माध्यम कार्यान्वयन निदेशालय, .

- यजदानी, जी. (1977). *दक्कन का प्राचीन इतिहास.* दिल्ली : मेकमिलन.

Suggested E- Resources:

- Maloney, Clarence.(1970). The Beginnings of Civilization in South India. *The Journal of Asian Studies*,Vol. 29, No. 3, pp. 603-616.

  https://www.jstor.org/stable/2943246?Search=yes&resultItemClick=true&searchText=history&searchText

- Tartakov, Gary Michael. (1980). The Beginning of Dravidian Temple Architecture in Stone. *Artibus Asiae,*Vol. 42, No. 1, pp. 39-99.

  https://www.jstor.org/stable/3250008?Search=yes&resultItemClick=true&searchText=chalukya&searchTe

HIST 308 Agriculture in Indian History

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Historiography on Agrarian History: Interpretations of the Nature, Structure, Agricultural technology and Agrarian Change in India

Unit 2 Agrarian System in Pre-Colonial: Rural Stratification; Ownership of Land and Agrarian Relations; Agricultural and Animal Husbandry

Unit 3 Structure of the Pre-Colonial Rural Economy: Debate on 'Village Self -Sufficiency' and 'Village Community

Unit 4 Agrarian Structure under the British Raj: Land Tenure System and Changes; Commercialization of Crops, Land Settlements Change in Land Ownership; Growth of Agricultural Laborers; New Agricultural Technology

Unit 5 Changing Forms of Peasantry; Rise of 'Rich Peasantry' with particular reference to the Punjab, U.P, Haryana;   Green Revolution and Land Reforms

Learning Outcomes: After the completion of the course, students will be able to:

- Trace the antiquity of Agriculture in India.
- Understand the development of Agriculture in India.
- Know about the agrarian relation in ancient, medieval and colonial India.

Recommended Books:

- Amartya, K.Sen. (1998). *Poverty and Famine: An Essay in Entitlement and Deprivation.* Oxford: Oxford University Press.
- Bose, Sujata. (1993). *Peasant, Labour and Colonial Capital: Rural Bengal since 1770*. Cambridge University Press.
- Guha, Dipankar.(1999). *Rivalry and Brotherhood : Politics in the Life of Farmers in Northern India*. India: OUP.
- Guha, Ramchandra.(1992). *The Unquiet Woods : Ecological Changes and Peasant Resistance in the Himalaya*. India: OUP.
- Habib, Irfan.(2013). *The Agrarian System of Mughal India. Oxford*: Oxford university Press.
- Randhawa, M.S.(1986). *A History of Agriculture in India, 4 Volumes.* ICAR New Delhi.
- Sahu, B.P. (1997). *Land System and Rural Society in Early India*. Delhi
- Sharma, R.S. (2003). *Perspectives in Social and Economic History of India*. Munshiram Manoharlal Publication.

Suggested E- Resources:

- Gupta, Anil K. (2004), "Origin of agriculture and domestication of plants and animals linked to early Holocene climate amelioration", *Current Science*, 87 (1), Indian Academy of Sciences.
- Irfan Habib, Dharma Kumar, Tapan Raychaudhuri (1987). *The Cambridge Economic History of India.* 1. Cambridge University Press.
- Irfan Habib (2011), Economic *History of Medieval India, 1200-1500*, page 53, Pearson Education
- *The History of Agriculture*. Britannica Educational. December 2012. ISBN 9781615309214.

Home Science

First Semester

HSC 101 Basics of Home Science and Resource Management

Max. Marks : 100	**L T P C**	
(CA: 40 + ESA: 60)	**6 0 0 6**	

Learning Outcomes: After the completion of the course, students will be able to:

- Interpret concept and scope of Home Science discipline
- Develop an insight into fundamentals of Resource and their management

Syllabus:

Unit 1   Fundamentals of Home Science

1. Definition, Philosophy and objectives of Home Science
2. Historical development of the field of Home Science in India (in brief)
3. Scope of Home Science - Educational and Vocational

Unit 2   Resource Management

1. Definition and concept of Resource Management
2. Systems Approach to Management
3. Family Resource Management as a system

Unit 3   Decision Making and Work Study

1. Decision making-Concept, Steps and Classification of decisions
2. Work Simplificaion-Work Study techniques, Classes of change
3. Management Process

Unit 4   Resources

1. Importance, types and characteristics
2. Obstacles to the improvement of resource management-lack of awareness of resoures and management, failure to evaluate results, seeking readymade answers, lack of information etc.
3. Resources constraints continuum.
4. Guidelines to increase satisfaction from resources

Unit 5 Factors Motivating Management

    1.   Values - sources, classification

    2.   Goals - types, characteristics

    3.   Standards - types, characteristics

References:

1. Bansal, I., & Kumari, C. (2010). *Home Science: An Introduction.* Newai (Raj) : Navjeevan Publishers.

2. Chandra, A. (1978). *Introduction to Home Science.* New Delhi: Metropolitan Book Company, Ltd.

3. Daecon, R.E., & Firebaugh, F.M. (1975). *Context and concepts of Management.* USA: Houghton Miffin Company.

4. Gross, I.H., & Crandall, E.W. (1980). *Management for modern families* (3rd ed.). New Jersey: Prentice Hall Inc. Engle Wood Cliffs.

5. Jain, V. (2002). *Grih Prabandh, Sadhan Vyavastha awem aantrik sazza.* Jaipur: Abhishek Publication.

6.   Koontz, H., & Weihrich, H. (2009). *Essentials of Management.* New Delhi: Tata McGraw Hill Publishing Co. Ltd.

7. Patni, M., & Sharma, L. (2017). *Grih prabandh* (25th ed.). Agra: Star Publication.

8. Stoner, J.,Freeman,R., & Gilbert, D. (1995). *Management* (6th ed.). New Delhi: Prentice Hall of India Pvt. Ltd.

9. Tripathy, P.C., & Reddy, P.N. (2001). *Principles of Management.* New Delhi: Tata McGraw Hill Publishing Co. Ltd.

10. Wangundy, A.B. (1981). *Techniques of structured problem solving.* New York :Van Nostrand Reinhold Company.

HSC 108L Interior Decoration Lab

Max. Marks : 100	**L T P C**	
(CA: 40 + ESA: 60)	**0 0 4 2**	

Learning Outcomes: After the completion of the course, students will be able to:

- Design and draw floor plans to meet a given set of requirements
- Apply informed judgments in designing interiors

Syllabus :

1.   Floor Plan drawing using engineering scales

2. Elements of Art
3. Principles of Design
4. Development of Colour Wheel
5. Development of Value Chart
6. Development of Colour Schemes
7. Furniture Arrangement using cut-outs for residential interiors
   (a) Living Room
   (b) Bed Room
   (c) Kid's Room
   (d) Space Planning for Kitchen
8. Development of motifs- Naturalistic, Geometric and Stylized

Second Semester

HSC 102 Basics of Human Development

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, students will be able to:

- Get insight into concept and various aspects of Human Development
- Appraise concerns and issues related to parenting and development aspects
- Relate theories to developmental aspects

Syllabus :

Unit I Human Development : An Overview
   a) Scope and significance of Human Development
   b) Human Development as multi disciplinary science
   c) Methods of child study

Unit II Orientation to Growth and Development
   a) Understanding growth and development (definitions)
   b) General principles of development
   c) Role of heredity and environment

d) Maturation and learning (with reference to Gessell's Maturational point of view and Watson and skinner's Behaviorist point of view)

Unit III Important Child Care Aspects

a) Fundamental needs of children

b) Child rearing practices, disciplinary practices and their impact on children

c) Importance of early years of life (with brief description of Freudian Psycho-analytic view)

Unit IV Dimensions of Development

a) Physical and Motor development – factors influencing motor development

b) Language development – functions, factors influencing

c) Moral development – meaning, factors influencing development (with special reference to Kohlberg's theory)

Unit V Dimensions of Development

a) Cognitive development across the life span (with brief introduction to Piaget's theory)

b) Emotional development – development of different emotions, factors predisposing to emotional development, characteristics of children's emotion

c) Social Development – Importance, factors influencing social development, agents of socialization

References :

1. Gupt Ram Babu (1996). *Vikasatmak Monovigyan*, Agra : Ratan Prakashan Mandir.

2. Hurlock Elizabeth B. – Bal Manovigyan (5th & 6th Edition), New Delhi: Tata Mc Graw Hill.

3. Hurlock Elizabeth B. (1978). *Child Development* (6th ed.). New Delhi : Mc. Graw Hill Publishers Ltd..

4. Laura.E.Berk (2013). *Child Development*. Illinois : Pearson.

5. Musson P., Conger J.J., Kegan J. and Haston A.C. (1990). *Child Development and Personality*. New York: Harper & Row.

6. Singh Vrinda (2006) *Manav Vikas evam Parivarik Sambandh*. Jaipur: Panchsheel Parkashan.

7. Verma, Priti, & Srivastava, D.N. (1996). *Bal Manovigyan – Bal Vikas*. Agra : Vinod Pustak Mandir.

HSC 107 Fundamentals of Foods and Nutrition

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Learning Outcomes: After the completion of the course, students will be able to:

- Describe the functions of food and role of various nutrients, dietary requirement of various nutrients, and effect of deficiencies and excesses
- Explain the methods of food preparation and principles applied in food preservation.
- Apply and incorporate the knowledge of nutritional requirement in various life stages.

Syllabus :

Unit I

    a) Nutrition as a Science – Definition and explanation, Nutrition health relationship, Nutrition as a process

    b) Definition of terms – 'Food', 'Diet' and 'Nutrients'

    c) Changes that occur in food in human body; Digestion, Absorption, Transport and Utilization

Unit II

A brief discussion pertaining to the nutritional importance and functions, deficiencies, sources and requirements of the following Macronutrients:

- Carbohydrates
- Fat
- Protein
- Water
- Dietary fiber

Unit III A brief discussion pertaining to the nutritional importance and functions, deficiencies, sources and requirements of the following Micronutrients:

- Fat soluble vitamins – A,D,E & K
- Water soluble vitamins – Vitamin C, Thiamine, Riboflavin, Pyridoxine, Folic acid and B12

- Minerals – Calcium, Phosphorus, Iron, Iodine, Sodium, Potassium, Chlorine, Zinc (Elementary idea about dietary and functional importance)

Unit IV

a) Description of five-food group system and importance in meal planning, concept of balanced diet, selection of foods based on five food group system.

b) Factors to be considered while doing meal planning (Elementary Idea)

c) Recommended dietary allowances for infancy, childhood, adolescence, adulthood, old age, pregnancy and lactation (Elementary Idea)

Unit V

a) Methods of food preparation: use of moist and dry heat; changes occurring in foods during cooking

b) Brief discussion of factors contributing to food spoilage and principles applied in household preservation

References:

1. Khanna, K., Gupta S, Mahna R, Puri S, Seth R and Passi SJ. (1997).*Text book of Nutrition & Dietetics.* New Delhi : Phoenix Publishng House Pvt. Ltd..

2. Mehtab, S. Bamji, K. Krishnawamy and GNV Brahmam.(1996).*Text Book of Human Nutrition,* New Delhi : Oxford & IBH Publishing Co. Pvt. Ltd..

3. Sharma,V .(1995) .*Food & Nutrition Science(2nd ed.).* Meerut : Loyal B*ook House.*

4. Singh,V. (2006).*Food & Nutrition Science (3rd ed.).* Jaipur: Panchsheel Prakashan.

5. Srilakshmi, B. (2004). *Nutrition Science*, New Delhi: New Age International Pvt. Ltd.

6. Swaminathan, M. (1985). *Essentials of Foods and Nutrition Vol.1* Madras : Ganesh and Co.

7. Wilson, E.D., Fisher K. H. & Fuqua M.E. (1975). *Principles of Nutrition.* Canada : John Wiley and Sons.

E- resources:

- Function of food, food groups, food chart

  https://www.slideshare.net/chefkaushal84/food-56547837

- Methods of cooking

  https://www.slideshare.net/laurahuang/methods-of-cooking-ppt-5914731

- Importance of nutrition, consumer rights, special diets, menu panning

  https://www.slideshare.net/itchomecare/8-nutrition-and-food-preparation-15193848

Third Semester

HSC 215 Nutrition in Health and Disease

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: After the completion of the course, students will be able to:

- Describe the role of nutrition and nutrients in health, disease and various life stages
- Explain the causes of food spoilage and types of food preservation
- Apply and incorporate the knowledge of therapeutic diet for various disease conditions

Syllabus :

Unit I

a) Nutrition and Health – its relationship

b) Role of Nutrients in Health: Protein, Fat, Carbohydrate, Iron, Calcium, Sodium, Iodine & Potassium

c) Role of Nutrients in Disease conditions (PEM, Obesity, Anemia, Diabetes Mellitus, Hypertension, Goitre, Osteoporosis/ Osteomalacia

d) Animal and plant proteins, mutual supplementation, protein quality.

e) Malnutrition – Under and over nutrition, its relationship with nutrient intake (fundamental aspects)

Unit II

a) Unit of energy, concept of BMR – activity and calorigenic effect of food

b) Calorific value of carbohydrate, protein and fat (food value)

c) Factors affecting energy requirement

d) Food hygiene, food spoilage and food preservation

Unit III

a) Benefits of good nutrition and health habits for body functioning

b) Nutrition during (fundamental aspects)

   a) Infancy

   b) Adolescence

   c) Pregnancy

   d) Lactation

Unit IV

a) Concept of diet therapy

b) Objectives and principles of diet therapy

c) Normal diet

d) Therapeutic adaptations of normal diet

Unit V Basic overview of definition, causes symptoms & dietary Management in -

a) Fevers (Acute, Chronic)

b) Diarrhoea

c) Constipation

d) Obesity

e) Diabetes Mellitus

f) Hypertension

References :

1. Khanna, K, Gupta S.,Mahna R,Puri S,Seth R and Passi SJ. (1997).*Text book of Nutrition & Dietetics.* New Delhi: Phoenix Publishing House Pvt. Ltd..

2. Sharma,V. (1995). *Food & Nutrition Science (3rd ed.).* Meerut: Loyal Book House.

3. Singh,V. (2006). *Food & Nutrition Science (3rd ed.).* Jaipur : Panchsheel Prakashan .

4. Srilakshmi, B. (2004). *Nutrition Science.* New Delhi : New Age International Pvt. Limited.

5. Swaminathan, M. (1985). *Essentials of Foods and Nutrition Vol.2* Madras: Ganesh and Co..

E- resources :

- Causes of food spoilage, sources, factors and its prevention

  https://www.slideshare.net/MAMATHESH/food-spoilage-microbiology

- Therapeutic diet in various diseases

  https://www.slideshare.net/sapnamanger/therapeutic-diet

- Basic nutrition

  https://www.slideshare.net/jinulazer/ppt-on-nutrients

HSC 205L Food and Nutrition Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: After the completion of the course, students will be able to:

- Plan and prepare different types and specific nutrient rich diets using different cooking methods
- Plan and prepare diets for various disease conditions
- Prepare food products using various preservation methods

Syllabus :

- *** Planning and Preparation of -**
  - Energy dense recipe
  - Protein rich recipe
  - Balanced diet
  - Full fluid diet
  - Soft diet
  - Diet in acute and chronic fever
  - Diet in diarrhoea
  - Diet in constipation
  - Low energy diet for obesity
  - Diet in diabetes mellitus
  - Diet in hypertension

* **Preparation of recipes involving -**
  - Pressure cooking
  - Steaming
  - Roasting
* **Food Preservation -**
  - Jam/Jelly
  - Squash
  - Oil free pickle

Fourth Semester

HSC 210 Introduction to Community Nutrition and Extension

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, students will be able to:

- Explain the linkages between nutrition, environment, health and disease

- Recognize the importance of malnutrition as a conditioning factor in relation to many diseases in community

- Get acquainted with the roles of national & international agencies in community nutrition

- Explain importance of extension programmes for the betterment of QOL in rural areas and develop skills for effective communication

Syllabus :

Unit I   Concept of extension education

      a)   Meaning, nature of extension education

      b)   Principles of extension education

      c)   Philosophy of extension education

      d)   Objectives of extension education

      e)   Methods of extension teaching

Unit II   Communication in Home Science extension

      a)   Communication – meaning, nature, key elements

      b)   Audio- Visual aids– definition, classification, selection, and use in Home Science education as per need of the community

Unit III

    a) An introduction of the concept of Nutrition and health education in India. Health and nutrition as indices of national progress.

    b) A brief introduction of role of national and international agencies engaged in the cause of Nutrition and health: National- ICMR, ICAR, CSIR, CFTRI, NIN; International- FAO, WHO, UNICEFF and CARE.

Unit IV

    a) Major nutritional problems in India, their prevalence, causes, signs and symptoms -

       PEM, Iron deficiency Anaemia, Iodine deficiency disorders and Vitamin A deficiency disorders

    b) National & state programmers running to uplift the nutritional status of population – ICDS, Mid day meal programme, Iron deficiency Anaemia Control programme, Vitamin A prophylaxis programme

Unit V

    a) Importance of water, potable & polluted water, water purification at domestic level.

    b) Causes, signs & symptoms, case & preventive measures (in brief) of following diseases.

       (i) Water, food & milk born disease- Cholera, typhoid, diphtheria, hepatitis & tuberculosis.

       (ii) Worm infestations – caused by round worm, hookworm & ant amoeba hystolitica (causing amoebiosis)

    c) Introduction to immunity- Innate, acquired, passive, active, principles of immunization, immunization schedule

References:

1. Bamji, M. S., Rao, P.N., & Reddy, V. (1996). *Text book of Human Nutrition.* New Delhi : Oxford and IBH publishing Co Pvt. Ltd.

2. Bhargava, B. (1999). *Parivarik Swastha avm samajik Kalyan* (2nd ed.). Jaipur: University Book House Pvt. Ltd.

3. Dhama, O.P., & Bhatnagar, O.P. (2010). *Education and communication for development.* New Delhi: Oxford & IBH Publishing Co.

4. Harpilini, B.D. (1994). *Grahavigyan mai Prasar Shiksha.* Agra: Star Publication.

5. Kalla, P. N., & Gakkhar, A. (2010). *New Dimension of Extension and Communication.* Jaipur: University Book House.

6. Kalla, P.N., & Gakkhar, A. (2005). *Prasar Shiksha ke naye Aayam.* Jaipur: Hindi Granth Academy.

7. Singh, V. (2005). *Food and Nutrition Science* (3rd ed.). Jaipur : Panchsheel Prakashan.

HSC 212 Life Span Development

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, students will be able to:

- Understand important aspects of development during the whole life span
- Understand the issues faced and adjustments required at each stage across the life span

Syllabus :

Unit I

 (a) Prenatal Development

- Stages of Prenatal Development
- Birth process
- Influences of genetic and environmental factors.
- Types of delivery
- Factors affecting and complications during Pregnancy.

 (b) Infancy

- Developmental tasks
- Physical, motor, and language development during infancy, common emotions in infancy

Unit II Early childhood

- Developmental tasks.
- Physical, motor, social and language development during early childhood.

- Role of Pre-school education.
- Importance of play and creative activities during childhood

Unit III Middle childhood years

- Developmental tasks.
- social development during middle childhood.
- Role of parents, peers and siblings
- Importance of schooling.

Unit IV Adolescence

- Developmental tasks.
- Concept of pubertyand growth spurt
- social and emotional development during adolescence

Unit V Adulthood & Old Age

- Developmental Tasks
- Physical and psychological changes during adulthood
- Adjustment problems s in old age

References:

1. Cole, M., & Cole, S. (1995). *The Development of Children*. New York, NY: Freeman & Co.

2. Craig, G. (1999). *Human Development*. New Jersey, NJ: Prentice Hall.

3. Gupt, R. (1998). *Matra Kala Shishu Palan avem Bal Vikas*. Agra: Ratan Prakashan Mandir.

4. Hurlock, E.B. (1978). *Child Development* (6th ed.). New York: McGraw Hill Ltd.

5. Hurlock, E.B. (1980). *Developmental Psychology – A life span Approach* (5th ed.). New York, NY: Tata McGraw Hill Publishing Co. Ltd.

6. Hurlock, E.B. (1990). *Vikas Manovigyan*. Pratham Khand/Dutiya Khand, Hindi Madhyam Karyanvay Nideshalaya, Delhi University Dwara Prakashit.

7. Verma, P. & Srivastava, D.N. (1996). *Bal Manovigyan – Bal Vikas*. Agra: Vinod Pustak Mandir.

E-resources:
- Life Span Development
  www.pdfdrive.com/life-span-development-e33437743.html
- Life-Span Human Development
  www.pdfdrive.com/life-span-human-development-
  e58160481.html
- Life-Span Human Development 7th Edition
  www.pdfdrive.com/life-span-human-development-7th-ed-
  e901075.html

Fifth Semester

HSC 308 Introduction to Textiles

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, students will be able to:

- Get basic knowledge about different fibers used in textile Industry, their physical and chemical characteristics and end use
- Identify different methods of yarn and fabric manufacturing and their characteristics and utility
- Analyze different techniques used to enrich the surface of fabric through dyeing and printing and finishing
- Discuss the use of different types of washing methods , equipments and different agents used in care and maintenance of fabric
- Evaluate different practices involved in Textile Industry and at household level

Syllabus :

Unit I Introduction and classification of textile fibers

Physical and Chemical properties of cotton, wool, silk, nylon, polyester, acrylic, acetate and their importance to the consumer

Unit II Construction of yarn and fabric

Yarn manufacturing – natural and man – made fiber spinning process

Fabric manufacturing – weaving, basic weaves, loom and its parts, knitting

Unit III

    a) Dyeing with synthetic dyes

    b) Printing : styles and various methods of printing

    c) Basic or routine finishes

Unit IV

    a) Laundering methods and equipments.

    b) Soaps and detergents.

    c) Water; hard and soft

    d) Other laundry agents – brief introduction to bleaches, stiffening agents and blues

Unit V

    a) Stain removal – domestic and chemical methods

    b) Dry cleaning

    c) Washing, drying, ironing and folding of different garments

    d) Care and storage of various garments

    e) Mending and renovation of garments

References :

1. Corbman, B. P. (1985). *Textile Fibres to Fabric*. New Delhi: Gregg Division - Mc. Graw Hill Inc.

2. Dantyagi, S. (1967). *Fundamentals of Textiles and Their Care*. New Delhi: Orient Longman.

3. Deolkar, D. (1971). *Household Textiles and Laundry Work*. New Delhi: Atmaram and sons.

4. Hollen, N. & Saddler, J. (1964). *Textile*. (5th ed.). New York, NY: Mc. Millan Publishing Co.

5. Joseph, L. M. (1986). *Introductory Textile Science*. America: Halt, Rinehart and Winston.

6. Kadolph, S. J. & Langbord, A. L. (11th ed.). (2014). *Textiles*, New Jersy: Prentice - Hall Inc.

7. Tortora, P.G. (1978). *Understanding Textiles*, New York, NY: Macmillan Publishing Company.

Discipline Elective – I

HSC 305 Family Dynamics and Parent Education

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- Gain information about importance, problems and adjustment in marriage life and family
- Attain knowledge about role of parents and their involvement for overall development of the child
- Get awareness about parent and community education for betterment of society

Syllabus :

Unit I

a) Concepts of marriage – Definition, meaning & goals of marriage.

b) Types and forms of marriage

c) Factors influencing mate selection

d) Dating, Courtship and Engagement - Meaning and objectives

Unit II

a) Adjustment in marriage – meaning, factor affecting marital adjustment and major areas of adjustment

b) Social problems and their impact on family relations – child marriage, dowry system, widowhood, remarriage & extra marital relations.

c) Marriage Counseling – meaning , need and importance

Unit III

a) Family – definition and meaning

b) Functions of family

c) Types of family

d) Breakup of family – division, separation, desertion.

e) Changing trends in family structure and roles

Unit IV

    a) Meaning, need of parent education and community education

    b) Principles and objectives of Parent education

    c) Brief introduction of methods of parent education – Home visit, school visit and parent teacher meeting

    d) Programme planning for parents and community education – factors and evaluation procedure

Unit V (i) Concept of mental health & role of parent in maintaining good mental health.

    (ii) Some problem behaviours,- cure and prevention

        a) Bedwetting

        b) Sibling Rivalry

        c) Aggression & Hostility

        d) Isolated Child

        e) Drug Abuse

        f) Masturbation

References:

1. Bhushan V, & Sachdeva R. (1983). *Introduction to Sociology*. Allahabad: Kitab Mahal.

2. Gupt R.B. (1996). *Vikasatmak Manovigyan*. Agra: Ratan Prakashan Mandir.

3. Mukharjee, R.K. (1979). *Indian Society*. Jaipur, Chaura Rasta: College Book Centre.

4. Rice F.P. (1983). *Marriage and Family*. Boston: Allyn & Bacan.

5. Schaefer, C.E., & Millman, H.L. (1981). *How to Help Children with Common Problems*. New York, NY: New American Library.

6. Tomar, R. B. (1976). *Parivarik Samaj Shastra*. Agra: Shree Ram Mehra & Co.

E-resources:

- Building Stronger Marriages and Families

  https://www.pdfdrive.com/building-stronger-marriages-and-families-e22030924.html

- Community Education as a Home for Family Support and Education Programs.

  https://www.pdfdrive.com/community-education-as-a-home-for-family-support-and-education-programs-e36264845.html

- Handbook of Parenting Volume 1 Children and Parenting

HSC 320 Family and Child Welfare

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, students will be able to:

- Get an insight into the family as a social system
- Understand about the family disharmony due to changing socio-economic conditions in the country.
- Gain an understanding of the needs and problems of children, youth, women, the aged and the family as a whole.
- Acquire knowledge about welfare services for family and children India

Syllabus :

Unit- I

1. Changing pattern of family in India :
   - ➢ Structural and functional changes as result of modernization
2. Causes and effects of family disharmony
3. Implications of family changes:
   - ➢ Female headed households,
   - ➢ Single –parent families,
   - ➢ Families with working women
   - ➢ DINK families

Unit- II Problems and needs of families in specific situations

- ➢ Families affected by natural calamities – earthquake, flood, famine.
- ➢ Families affected by war, riots and terrorism.
- ➢ Families with chronically ill patients and disabilities
- ➢ Families in extreme poverty conditions
- ➢ Families with marital discord.
- ➢ Migrant families
- ➢ Families with adopted children

Unit –III

1. Issue related to children- Health and nutrition, literacy and education, drop outs, recreation, self help and vocational training.

2. Children in difficult circumstances – Gender disparities, lactch key children, homeless children, abused children, young offenders

3. Children in conflict with self and others : emotional and psychological aspects

Unit – IV

1. Situation of women in India : health , reproductive health and nutrition, education, employment, sexual harassment and domestic violence, role of conflict in women, marginalization of women – widows , divorced, deserted women , women with dependent children

2. Problems of adolescents and youth : substance abuse , unemployment , antisocial active

3. Specific problems of aging population : health and medical care, housing and family support and financial assistance

Unit V

1. Welfare programmes : meaning , need and status in India

2. Different types of welfare programme pertaining to family in India:
   ➢ Maternal and child help services
   ➢ Institutional services for women and children in distress
   ➢ Services for children with disabilities and youth
   ➢ Services for aged

References :

1. Acchpal, B and Verma, A (1988): Towards better Families : An Intergrated Approach to Family Life Education, Baroda

2. Augustine, J.S. (Ed) (1992) : The Indian family in transition, New Delhi : Vikas Publishing House, Unit I & II (entire book)

3. Bhatia, M.S. (1993) Ageing and Society, Udaipur: Arya's Book Centers. Unit IX. Chapter III to VIII, pp40-208

4. Choudhary D.P. (1985) : Child welfare development , Atma Ram & Son Delhi

5. Desai, K.G. (Ed.) (1988): Ageing in India, Bombay: Tata institute of Social Sciences. Unit IX (entire book)

6. Desai, N. and Krishnaraj, M(1987) : Women and society in India, Delhi: Ajanta Publications, Unit IV (entire book).

7. NIPCCD (1994): Child in India: A statistical profile, New Delhi NIPCCD

8. Sinha, J.MP. (1989): Problems of Ageing, New Delhi : Classical Publishing company, Unit IX, Chapter V pp 63-98

9. TISS (1991): Research in Families with problems in India, Volume I and II Bombay : TISS Unit V, Part IV pp147-187, 204-246, Vol II Part I, pp 269-289, 299-312

10. UNICEF (1990) : Children and Women in India: A Situation Analysis Unit VI, VII.

Sixth Semester

HSC 312L Textile care and Clothing Construction Lab

Max. Marks : 100	**L T P C**	
(CA: 40 + ESA: 60)	**0 0 8 4**	

Learning Outcomes: After the completion of the course, students will be able to:

- Learn basic garment construction and embroidery skills
- Use learned skills in garment construction for different age groups and figure types
- Learn basic knitting stitches and their use for knitting different garments
- Apply theory in taking care of household textiles and garments

Syllabus :

1. Washing of garments – cotton, silk and wool

    Starching and Ironing

    Removal of stains

2. Construction process in garment making, simple stitches, seams and seam finishes, darts, pleats, tucks, gathers, finishing of raw edges – hemming, piping, facing etc., placket opening, fastners

3. Embroidery stitches: Samples of different stitches: using at least two types of stitches on any article

4. Drafting and stitching of the following garments:

    Jhabla, Jangia, Romper or Frock for Children, saree blouse or Punjabi kurta, salwar or churidar

5. To knit anyone of the following:-

    Babasuit, Cardigan, Pullover

Discipline Elective – II

HSC 307 Introduction to Clothing

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, students will be able to:

*   Understand the basic essentials of clothing construction
*   Assess the various steps involved in the process of garment making
*   Gain the skills required for apparel construction

Syllabus :

Unit I

a) Sociological, Physical and Psychological aspects of clothing

b) Selection of fabrics, design, colour for children garments according to age Clothing for adolescents, middle age and old age

Unit II

a) Fundamentals of clothing construction – its importance; terms used in clothing construction.

b) Equipments – Measuring, Marking, Cutting, Stitching Sewing machine – types, parts, care, handling and problems

Unit III

a) Principles and elements of art in clothing design

b) Factors affecting selection of fabric – age, sex, occupation, figure, garment style, fashion

Unit IV

    a) Body measurements and proportion, figure types

    b) Preparation of fabric for garment cutting

    c) Layout types and cutting of the fabric

Unit V

    a) Hand knitting – abbreviations, types and selection of needles and yarn, patterns

    b) Machine knitting – Simple hand knitting machine, its parts and operations

References :

1. Bendell, P. & Reader's Digest (1995). *Complete guide to sewing*. Montreal. Canada: Penguin printing trade Ltd.

2. Doongaji, (2002). *Basic processes of clothing construction*. Delhi: Raaj Prakashan.

3. Mc-Call's (1963). *Sewing Book*. New York: Random House, Inc.

4. Smith, A. (1981). *Sew simple : A step by step guide to dress making*. Hutchinson, MA: English Sewing Ltd. .

HSC 322 Fundamentals of Family Clothing

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- Describe the selection factors for fabrics and clothes of individuals of different age group.

- Understand specific property of fabric required for different types of garments.

- Elaborate various functions of clothing.

- Use different principles and elements of art while selecting or designing dress for different figure types.

Syllabus :

Unit I   Selection of fabric for different garments. Garment type and their selection- outer garments and under garments. Readymade and home made garments.

Unit II   Family clothing decisions- steps and factors. Family wardrobe principles- community, budget, occasion, climate, occupation, interest, size, composition of the family, fashion, quality and accessories.

Unit III Body measurements and proportion, figure types. Principles and elements of art in clothing design. Preparation of fabric for garment cutting. Layout types and cutting of the fabric.

Unit IV   Sociological, physical and psychological aspect of clothing. Factors influencing consumption of textiles

Unit V   Children's clothes: selection of fabrics, design, colour for children garments according to age. Clothing for adolescence, middle age and old age.

References:

1.   Alexander (1972). *Textile Products, Selection, Use and Care*. London: Miffen Co.

2.   Frings, G.S. (1999). *Fashion from concept to Consumer*. New Jersey: Prentice Hall.

3.   Lewis, D.S. & Bowers, M.G. (1960). *Clothing construction and wardrobe planning*. New York: Macmillan Book Company.

4.   Tate, M.T. and Glisson, O. (1967). *Family clothing*. New York: John Wiley and Sons.

5.   Wingate, Isabel B. (1965). *Textile Fabrics and Their Selection*. London: Prentice-Hall, INC.

Indian Classical Dance (Kathak)

First Semester

DNCE 105 Literature of Indian Classical Dance–I (Kathak)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- The origin of dance hence command over technical terms of Kathak Dance.
- Recognize and apply the Neck and Eye movements and Hastmudras.
- Execute basic etiquettes of the various Taals.

Content -

Unit-1

1. Origin of Dance.
2. Definition of the following :

Laya, Theka, Tatkar, Tehai, Vandana, Kasak- Masak, That, Aamad.

Unit-2

1. Knowledge of four Neck movements according to Abhinaya Darpan with its use in Kathak Dance.
2. Knowledge of eight Eye glances according to Abhinaya Darpan with their use.

Unit-3

1. Definition of 'Mudra.' Study of the following Asamyukta Hasta Mudra with their use in Dance :

Pataka, Tripataka, Kartrimukha, Mayura, Ardhachandra, Shuktunda, Musthi, Shikhar, Kapittha, Katkakmukha, Soochi, Chandrakala, Padamkosha.

2. Short study of Nritta, Natya and Nritya.

Unit-4 Essay on:

1. Effect of Costume & make up in Kathak Dance.
2. Importance of the instruments used in accompaniment of Kathak Dance.

Unit-5

1. Description of following talas with their Thah, Dugun, and Chaugun Layakaries :

   Teen-Taal, Jhap-Taal, Dadra-Taal, Kaherva-Taal.

2. Write with notation of all Bandish or bols learnt by students.

Suggested Readings:

1. Shukl, Shastri Babulal (2017), Natyashastra, Chaukhambha Sanskrit Sansthan, Varanasi.

2. 'Azad', Pt. Tirathram, Kathak Darpan, Nateshwar Kala Mandir, New Delhi (Second Edition).

3. Dadhich, Dr. Puru (2016), Kathak Nritya Shiksha, Part-I, Bindu Prakashan, Indore.

4. Singh, Mandvi, Kathak Nritya Parampara, New Delhi.

5- Khokar, Mohan. (1984). Traditions of Indian Classical Dance. New Delhi: Clarion Books.

Online references:

1. www.gandharvapune.org

   (Learn Classical Dance Kathak)

2. www.learn kathakonline.com

   (Online Kathak lessons by Guru Palichandra)

3. www.dancelassonline.in

   (Online dance lessons and certificate course for biggners on skype by Divya Dance School)

DNCE 111L Performance of Indian Classical Dance-I (Kathak)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- Execute basic etiquettes of Dance.
- Perform combined hand, feet movements and formation of figures.
- Formulate chakkars

Content –

Practical demonstration of the following:

1. **Teen taal with its:**
    (A) Tatkar in Thah, Dugun and Chaugun Layakeries.
    (B) Ten Palta with Tehai.
    (C) Two Amad
    (D) Rangmanch ka Tukda.
    (E) Eight simple Toda-Tukda.
    (F) Two Paran Simple.
    (G) Two Gatnikas.
    (H) Four Tihai
    (I) One Chakkardar Paran

2. **Jhap taal with its :**
    (A) Tatkar with its Thaah, Dugun and Chougun Layakeries.
    (B) Four simple Toda.
    (C) Two Tehai

3. Abhinaya on any one Shloka.

4. Padhant of whole Material by hand in all talas mentioned above.

5. Practice of hand movements with Taal.

6. Ability to recognize the following Taalas played on Tabla and Harmonium : Teen-taal, Jhap-taal.

7. Padhant in Thah, Dugun, Chougun of following Tals:

    Teen-taal, Jhap-taal, Dadra-taal.

8. Recognition of the Composition such as Tehai, Layakaries etc. Composed by the examiner.

Second Semester

DNCE 106 Literature of Indian Classical Dance-II (Kathak)

	L	T	P	C

Max. Marks : 100
(CA: 40 + ESA: 60)   **L T P C**
                        4 0 0 4

Learning Outcomes: After the completion of the course, students will be able to:

- Understand the development of Kathak Dance in Historical perspective.

- Explain the abhinaya and its types, head movements.

- Understand the regional folk dance and Raas.
- Learn the Taal system.

Content -

Unit-1

1. History of Kathak Dance.
2. Study of essential characteristics of Bharatnatyam.

Unit-2

1. Study of Aanga, Pratiaanga and upanga.
2. Nine head Movements (Shirobheda) according to Abhinaya Darpan.

Unit-3

1. Defination of the following :
   Kavitta, Paran, Chakardarparan, Tora, gat.
2. Abhinaya and it's various kinds (Aangik Abhinaya Vachik Abhinaya, Satvik Abhinaya and Aaharaya Abhinaya)

Unit-4

1. Study of Rasa according to Abhinaya Darpan.
2. Study of the following folk dances of : Ghumar, Kalbelia

Unit-5

1. Comparative study of the following Talas :
   (i) Teen Taal and Badi Sawari.
   (ii) Jhap Taal and Sool Taal.
2. Notation of all the Bols learnt by students.

Suggested Readings:

1. 'Azad', Pt. Tirathram (2013), Kathak Praveshika, Nateshwar Kala Mandir, New Delhi.
2. Dadhich, Dr. Puru (1948), Kathak Nritya Shiksha, Part-II, Bindu Prakashan, Indore.
3. Dadhich, Dr. Puru (2016), Kathak Nritya Shiksha, Part-I, Bindu Prakashan, Indore.
4. Khokar, Mohan (1984), Traditions of Indian Classical Dance, New Delhi, Clarion Books.
5. Kumar, Amit (2014), Famous Dancing Gurus, New Delhi, Cyber Tech Publications.

Online references:

1. www.gandharvapune.org
   (Learn Classical Dance Kathak)

2. www.learn kathakonline.com
   (Online Kathak lessons by Guru Palichandra)

3. www.dancelessonline.in
   (Online dance lessons and certificate course for biggners on skype by Divya Dance School)

DNCE 112L Performance of Indian Classical Dance-II (Kathak)

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**0**	**0**	**8**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

- Execute the different Taals and foot work in Kathak.
- Perform Shloka and padhant of all bols.
- Formulate the composition.

Content -

Practical demonstration of the following -

1. **Jhap Taal with its:**

   (A) Tatkar with it's Thah, Dugun, Chaugun Layakaries.

   (B) Rangmanch ka Tukda.

   (C) TwoThaat

   (D) Two Aamad

   (E) Eight Tora-Tukda.

   (F) Two simple and one Chakkardar Paran.

   (G) Four Tihai

2. **Tritaal**

   (1) Two Paran Simple

   (2) Two Chakkardar Paran

   (3) Gat-bhav Panghat Lila

   (4) One Kavitta

3. **Dhamar Taal with its:**

    (A) Tatkar with its Thah, Dugun and Chaugun.

    (B) Four Simple Tukra

    (C) Two Tihai

4. Padhant of whole Material by hand in all talas mentioned above.

5. Practice of advance hand movements with Taal.

6. Ability to recognize the following Taalas played on Tabla and Harmonium : Jhap Taal, Dhamar Taal.

7. Padhant in Taah, Dugun, Chougun of following Taals : Jhap Taal, Dhamar Taal, Kaharva Taal.

8. Recognition of the composition such as Tehai, Layakaries etc. composed by the examiner.

Third Semester

DNCE 201 Literature of Indian Classical Dance-III (Kathak)

Max. Marks : 100   **L**   **T**   **P**   **C**
(CA: 40 + ESA: 60)   **4**   **0**   **0**   **4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Recognize various Gharanas and other Indian Classical Dance forms.

2. Understand technical terms of Kathak Hastamudras and their uses in Kathak Dance.

3. Develop the knowledge of Kathak Legends.

Unit 1

    1. Origin Study of essential Characteristics of Kathakali and Mohiniattam.

    2. Knowledge of four school of Kathak (Gharana)

Unit 2

    1. Study of following terms.

       (a) Natwari (b) Permelu (c) Tandav and Lasya with their types (d) Kavitta

2. Study of the following Asamyukta Hasta Mudra with Shlok and their use in Dance.

Sarpsheersh, Mrigsheersh, Singhmukh, Kangul, Alpadam, Chatur, Bhramar, Hansasya, Mukul, Hans-Pakcsh, Sandash, Mukal Tamrachurn, Trishul, Vyaghra, Ardhdhsuchi, Katak, Palli

Unit 3

1. Life Sketch and their Contribution

   (a) Thakur Prasad (b) Bindadin Maharaj (c) Narayan Prasad

   (d) Sunder Prasad

2. Study of following Folk Dances

   (a) Geendad   (b) Teratali

Unit 4   Essay

1. Guru-Shishya Parampara.

2. Importance of Laya & Taal in Kathak Dance.

Unit 5

1. Notation of all the Bols learnt by students

2. Knowledge of following taals

   (a) Ashttmangal (b) Pancham Sawari

Suggested Readings:

1. 'Azad', Pt. Tirathram (2015), Kathak Gyaneshwari, Nateshwar Kala Mandir, New Delhi (Second Edition).

2. Dadhich, Dr. Puru (1948), Kathak Nritya Shiksha, Part-II, Bindu Prakashan, Indore.

3. Dave, Dr. Prem (2004), Kathak Nritya Parampara, Panchsheel Prakashan, Jaipur.

4. Raghuveer, Dr. Geeta (2000), Kathak ke Prachin Nrattang, Publication Scheme, Jaipur.

5. Kumaraswamy, Ananda (1970), The Mirror of Gesture, New Delhi, Munshiram Manoharlal.

6. Khokar, Mohan. (1984). Traditions of Indian Classical Dance. New Delhi: Clarion Books.

7. Massey, Reginald (1999), India's Kathak Dance -Past, Present, Future, New Delhi, Shakti Malik Abhinav Publications.

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1. www.gandharvapune.org
   (Learn Classical Dance Kathak)

2. www.learn kathakonline.com
   (Online Kathak lessons by Guru Palichandra)

3. www.www.sangeetamujumder.com
   (Online Kathak classics by sangeetamujumder)

4. www.dancelassonline.in
   (Online dance lessons and certificate course for biggners on skype by Divya Dance School)

DNCE 207L Performance of Indian Classical Dance-III (Kathak)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Develop the Skills of musicality and various forms of Dance with expression.

2. Develop foot leg exercises back exercise, contractions over curve.

3. Manage the time or time-management.

4. Improve health, wellbeing and learning ability through Dance.

5. Develop appreciation for the art form.

1. **Tritaal –**

   1. Tatkar with Thah, Dugun, Tigun, Chaugun and Attagun with Tihai

   2. Advanced Palta with Tihai

   3. Two Aamad (1 Traditional Paranjudi Aamad)

   4. Four Tukdas (Two Natwari Tukda one Chakradaar Natwari)

   5. Two Paran Simple and Two Chakradaar Paran.

   6. Advance gat Nikas

   7. Four Tihai

   8. One Bhajan

   9. Gatbhav-Ched-Chad, Varieties of Ghunghat and Advance gat Nikas

   10. Kavitta

2. **Dhamar Taal with its:-**
   1. Tatkar with its Thah, Dugun, Chaugun, Layakaries
   2. Rangmanch ka Tukda
   3. Two Aamad
   4. Eight Tora-Tukda
   5. Two Simple and one Chakkardar Paran
   6. Four Tihai
3. **Chautaal with its:-**
   1. Tatkar with its Thah, Dugun and Chaugun.
   2. Rangmanch ka tukda.
   3. Two Aamad.
   4. Two simple Tukda.
   5. Two Tihai.
   6. Padhant of whole Material by hand in all taals mentioned Above.
   7. Ability to recognize the following Taals played on Tabla and Harmonium:- Dhamar, Chautal.
   8. Padhant in Thah, Dugun and Chougun of following taals:- Kaharva, Ektaal, Rupak Taal.
   9. Recognition of the composition such as Tehai, Layakaries etc. composed by the examiner.

Fourth Semester

DNCE 202 Literature of Indian Classical Dance-IV (Kathak)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Formulate the Sanyukta Hasta Mudras.
2. Understand the Sangeet and Taal.
3. Recognize the famous dancers and self made composition with notation.

Unit 1 1. Definition of Sanyukta Hasta-Mudra all kinds.

Unit 2 1. Definition of Sangeet

2. Define Taal and its Ten Parans

Unit 3 1. Importance of Rasas in Kathak Dance

2. Importance of Thumari in Kathak Dance

Unit 4 Life sketch of:-

(a) Shri Shambhu Maharaj

(b) Shri Lachhu Maharaj

(c) Shri Mohan Rao Kalyanpurkar

Unit-5 Notation of all the Bols learnt by students.

Comparative study of taals

(a) Chautaal & Ektaal

(b) Matt-taal & Laxmi taal

Suggested Readings:

1. Khare, Shikha (2005), Kathak Saundaryatmak Shastriya Nritya, Kanishk Publishers, Distributers, New Delhi.

2. Shukl, Shastri Babulal (2017), Natyashastra, Chaukhambha Sanskrit Sansthan, Varanasi.

3. 'Azad', Pt. Tirathram, Kathak Darpan, Nateshwar Kala Mandir, New Delhi (Second Edition).

4. 'Azad', Pt. Tirathram (2015), Kathak Gyaneshwari, Nateshwar Kala Mandir, New Delhi (Second Edition).

5. Dadhich, Dr. Puru (1948), Kathak Nritya Shiksha, Part-II, Bindu Prakashan, Indore.

6. Dave, Dr. Prem (2004), Kathak Nritya Parampara, Panchsheel Prakashan, Jaipur.

7. Raghuveer, Dr. Geeta (2000), Kathak ke Prachin Nrattang, Publication Scheme, Jaipur.

8. Bhatnagar, Chaya (1981), Bharat ke Shastriya Nritya, Youngman Fund Company, Delhi.

9. Bakshi, Dr. Ku. Jyoti (2000), Kathak Akshron ki Aarsi, Madhya Pradesh Hindi Granth Academy.

10. Kumaraswamy, Ananda (1970), The Mirror of Gesture, Munshiram Manoharlal, New Delhi,.

11. Khokar, Mohan (1984) Traditions of Indian Classical Dance, Clarion Books, New Delhi.

12. Kumar, Amit (2014), Famous Dancing Gurus, Cyber Tech Publications, New Delhi.

13. Massey, Reginald (1999), India's Kathak Dance -Past, Present, Future, Shakti Malik, Abhinav Publications, New Delhi.

14. Mehta, Usha (2011), Legacy of Classical Dances in India, Cyber Tech Publications, New Delhi.

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1. www.gandharvapune.org

   (Learn Classical Dance Kathak)

2. www.learn kathakonline.com

   (Online Kathak lessons by Guru Pali Chandra)

3. www.www.sangeetamujumder.com

   (Online Kathak classics by sangeetamujumder)

4. www.dancelassonline.in

   (Online dance lessons and certificate course for biggners on skype by Divya Dance School)

5. https://youtu.be/x6ArP5ne1wk

   (Origin of Kathak from Doordarshan archives)

6. https://youtu.be/XZlyOAHwDOO

   (Kathak Documentary by Mukta Joshi)

DNCE 208L Performance of Indian Classical Dance-IV (Kathak)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Execute the various types of expression.
2. Develop to play other instruments.
3. To Perform in more expressive and communicating way.

1. **Ashttmangal**
   (1) Tatkar with its Thah, Dugun, Chaugun
   (2) Rangmanch ka Tukda

    (3) Two Aamad

    (4) Four simple Tukdas

    (5) Two Chakradar Tukdas

    (6) Two Tihai

2. **Chautaal**

    (1) Two Chakradar Paran

    (2) Two Sada Paran

    (3) Four Tihai

3. **Tritaal**

    (1) Thah, Dugun, Tigun, Chaugun, Atthgun advance palta with Tihai

    (2) Advanced That with Kasak-Masak

    (3) Tisra Jati ki Aamad

    (4) Paran-Tisra Jati

    (5) Parmelu (one)

    (6) Natwari (one)

    (7) Kavitta (one)

    (8) Gatbhav-Holi

    (9) Ladi

4. Padhant of whole Material by hand in all taals mentioned above.

5. Ability to recognize the following Taalas played on Tabla and Harmonium.

6. Padhant in Thah, Dugun, Chaugun of following taals - Matt-Taal Shikhar

7. Recognition of the composition such as Tihai Layakaries etc. composed by examiner

Fifth Semester

DNCE 301L Performance of Indian Classical Dance-V (Kathak)

Max. Marks : 100   **L T P C**

(CA: 40 + ESA: 60)   **0 0 8 4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Perform the additional Taals: Pancham Sawari, Shikar.

2. Perform live shows.

3. Develop the Art appreciation.

Tritaal

    (1)   That (with Kasak-Masak)

    (2)   One Amad of Tisra Jati

    (3)   One Amad of Chatasra Jati

    (4)   Paran (Misra Jati)

    (5)   Two Permelu

    (6)   Two Natwari

    (7)   Kavitta

    (8)   Tatkar Thah (Barabar) Dugun, Tigun, Chaugun, Athgun.

    (9)   Gat-Bhav (Makhan Chori)

Ashtmangal

    (1)   Two Amad

    (2)   Four simple Tukdas

    (3)   Two Chakkardar Tukdas

    (4)   Two simple Paran

    (5)   One Chakkar Paran

    (6)   Some Tihais

Sawari

    (1)   Tatkar (Thah Barabar, Dugun, Chaugun)

    (2)   Rangmanch ka Tukda

    (3)   Two Amad

    (4)   Four Tukdas

SIXTH SEMESTER
DNCE 312L Performance of Indian Classical Dance-VI (Kathak)

Learning Outcomes: After the completion of the course, students will be able to:

- Perform as a dancer on stage.
- Execute the desires, emotions and imagination through Dance.
- Develop their vision.

1. **Tritaal -**

    (1) Advauced Aamad

    (2) Tisra Jati Aamad

(3) Natwari Tukda

(4) Chakkardar Permelu

(5) One Paran in each Jati (Tisra Jati, Misr Jati)

(6) Kavitt

(7) Ladi Tisra Jati

(8) Gat Nikas

(9) Abhinaya – Any of Two

    (a) Shlok   (b) Bhajan

    (c) Thumri   (d) Gat Bhav (Kaliya Mardan)

2. **Pancham Sawari-**

 (1) Two Chakkardar Tukda   (2) Two Simple Paran

 (3) Two Chakkardar Paran   (4) Four Tihai

3. **Sikhar Taal-**

(1) Tatkar- Barabar, Dugun, Chaugun with Tihai

(2) Rangmanch Ka Tukda

(3) Aamad (Two)

(4) Four Simple Tukda

(5) Two Chakkardar Tukda

(6) Two Simple Paran

(7) Tihai

Discipline Electives

MUS 308L Performance of Indian Classical Music (Tabla)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Content –

1. Basic knowledge of 10 varna of Tabla and Practice of their playing Technique.

2. Recitation and playing Teen Taal, Kaharwa Taal, Dadra Taal, Rupak Taal in Thah, Dugun on Tabla.

3. Practice of simple kayada, four paltas and Tihai in Teen Taal.

4. Recognizr the taal on Tabla according to syllabus.

5. Playing notation on hand of learnt kayada and paltas according to syllabus.

MUS 307L Performance of Indian Classical Music (Harmonium)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Content –

1. Introduction of Harmonium's Key-Board.
2. To Set fingers on Harmonium with its appropriate technique
3. Practice of Simple and Complex Alankaars.
4. Practice of Sargam Geet with Rhythem and Taal
5. Practice of playing Geets.

DNCE 309L Performance of Rajasthani Folk Dance

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Content –

1. Basic Pad Sanchalan
2. Basic Hand movements.
3. Technique of Anga Sanchalan.
4. Performance on Rajasthani Dance (any one)
5. Knowledge of following taals.
    - (a) Teen Taal.
    - (b) Dadara Taal.
    - (c) Kaharwa Taal.
    - (d) Deepchandi Taal.

DNCE 307L Performance of Other Classical Dance (Bharatnatyam)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Content –

1. Bhumi Namaskar.
2. Adavus in three layas.
3. Asamyukta and Samyukta Hasta Mudras.
4. Jati.
5. Sapta Taal Playing.

DNCE 308L Performance of Other Classical Dance (Manipuri)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Content –

1. Study of Pada Bheda Khogtha Makhal Bahu Bhed (Pambom Makhal)

2. Rasantika Chari, Khohchat (Leinet) Sampluta Chari (Achongbi) Upavishtha (Afambi) Bhramari (Areibi) Karkaran (Khuteha Makhal)

3. Tanchap, Menkup, Challi, playing in Taala and bola.

4. Basic Challi and Alankar.

   Nupi Chali (lasya)

   Nupa Challi (Tandav)

   (a) Nritta Bandha (Punglol Jagoi)

   (b) Prabandha Nartan (Ishei Jagoi)

5. Study of learnt song, Taal and Bolas.

Indian Classical Dance (Bharatnatyam)
First Semester
DNCE 107 Literature of Indian Classical Dance-I (Bharatnatyam)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Develop the knowledge of the origin of dance and technical terms.
2. Recognize and apply the Neck and Eye movements and Hastmudras.
3. Execute basic etiquettes of the various Taals.

Content

Unit I

1. Introduction to Bharatnatyam.
2. Technical terms in Dance
    (a) Aarmandi
    (b) Muramandi
    (c) Aavartanam

Unit II

1. Sapta Taal according to carnatic music.

Unit III

1. Life sketch
    (a) Mylapore Gauri Amma.
    (b) Bala Saraswati
    (c) Rukmini Devi

Unit IV

1. Dhyan Shloka according to Abhinaya Darpan (Namaskriya), Asamyutta Hasta, Shiro Bheda, Drishti Bheda, Griva Bheda.

Unit V

1. Notations of all Adavus and Alarippu

Suggested Readings:

1. P. Ramachandra Sekhar, Dance Gestures (Mirror of expressions) Abhinaya Darpana

2. Amit Kumar, Famous Dancing Gurus
3. Pt. Tirtharam Azad, Kathak Gyaneshwari
4. Dr. Puru Dadhich, Kathak Nritya Siksha
5. Vachaspati Gairola, Chokhamba Sanskrit Pratishthan, Delhi, Bhartiya Natya Parampara and Abhinaya Darpan
6. Kali Prasad Goswami, Devdasi: Dancing Dansel
7. Manjula Panth And Meera Mathur, Text Book of Bharatnatyam
8. Pt. Sitaram Chaturvedi, Bhartiya Tatha Paschatya Rangamancha
9. Dr. Lakshmi Narayan Garg, Abhinaya Darpan & Geet Govind
10. Dr. Laxminarayan Garg, Bharatnatyam Part 1 & 2

Online references:
1. https://youtu.be/zi9G6iPanQ
2. https://youtu.be/6R-jUeSdxd4
3. https://youtu.be/Y_vUCoufnws

DNCE 109L Performance of Indian Classical Dance-I (Bharatnatyam)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Learning Outcomes: After the completion of the course, students will be able to:

1. Execute basic etiquettes of Dance.
2. Perform combind hand, feet movements and formation of figures.

Content

1. All Adavus (Vilambit and Madhya laya)
2. Alarippu
3. Demonstration of Asanyuktta Hasta, Shiro Bheda, Drishti Bheda and Griva Bheda.
4. Adavus and Alarippu Playing in Taal.

Second Semester

DNCE 108 Literature of Indian Classical Dance-II (Bharatnatyam)

Max. Marks : 100	**L T P C**
(CA: 40 + ESA: 60)	**4 0 0 4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Understand the Bharatnatyam Dance in Historical aspect.
2. Explain the technical terms.
3. Learn the Taal System.

Unit I 1. History and Development of Bharatnatyam.

        2. Technical terms.

           (a) Laya   (b) Jaati   (c) Gati

           (d) Graha (e) Yati   (f) Adavu

Unit II 1. Abhinaya.

        2. Abhinaya and its types.

Unit III 1. Classical dances of India.

Unit IV 1. Viniyogas of Asanyutta Hasta (first 14)

        2. Sanuytta Hasta According to Abhinaya Darpan.

Unit V 1. Adavus

        2. Jatiswaram

        3. Pada Bhedas from Abhinaya Darpan and Mandala Bheda

        4. Tirmanam (Jati) and any two Korvai Notations

Suggested Readings:

1. P. Ramachandra Sekhar, Dance Gestures (Mirror of expressions) Abhinaya Darpana
2. Amit Kumar, Famous Dancing Gurus
3. Pt. Tirtharam Azad, Kathak Gyaneshwari
4. Dr. Puru Dadhich, Kathak Nritya Siksha
5. Vachaspati Gairola, Chokhamba Sanskrit Pratishthan, Delhi, Bhartiya Natya Parampara and Abhinaya Darpan
6. Kali Prasad Goswami, Devdasi: Dancing Dansel

7. Manjula Panth And Meera Mathur, Text Book of Bharatnatyam

8. Pt. Sitaram Chaturvedi, Bhartiya Tatha Paschatya Rangamancha

9. Dr. Lakshmi Narayan Garg, Abhinaya Darpan & Geet Govind

10. Dr. Laxminarayan Garg, Bharatnatyam Part 1 & 2

Online references:

1. https://youtu.be/zi9G6iPanQ

2. https://youtu.be/N7bGp-SRpvm

DNCE 110L Performance of Indian Classical Dance-II (Bharatnatyam)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Learning Outcomes: After the completion of the course, students will be able to:

1. Execute the different Taals and foot work in Kathak.

2. Perform Shloka and recite the shollukattu and bol.

3. Formulate the composition.

Content

1. Adavus

2. Jatiswaram

3. Playing on Tattakadi

4. All Shlokas from Syllabus (Abhinaya Darpan)

5. Taal Playing of Tirmanam (Jati) and Korvai (Jatiswaram)

THIRD SEMESTER

DNCE 203 Literature of Indian Classical Dance-III (Bharatnatyam)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Theory

Unit 1   a)   Margam (reprtoire) of Bharatanatyam.

        b)   Detailed study of Nayak and Nayika Bhedas with their Varieties.

Unit 2   a)   Guru Shishya parampara.

        b)   Detailed study of Tandava, lasya and its Varieties.

Unit 3   (a)   General Introduction of the term Nattuvanar and there role in Bharatnatyam recital.

        (b)   Aharya of Bharatnatyam.

Unit 4   (a)   Sholakas form Abhinaya darpan – Viniyogas with Shloka from Asamyutta hatas last 14.

Unit 5   (a)   Notation of Pushpanjali and Jathiswaram (Jathis,Korvais and songs) Learnt in syllabus.

DNCE 205L Performance of Indian Classical Dance-III (Bharatnatyam)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

1. Pushpanjali
2. Jathiswaram
3. Demonstration of the viniyogas of last 14 Asamyutta hasta with Shlokas according to Abhinyadarpan.
4. Rendering Pushpanjali and jathiswaram (jathis, Teermanam, Korvais and songs) Leaarnt in syllabus.

Learning Outcomes: After the completion of the course, students will be able to:

❖   Sequence of Bharatanatyam items.

❖   Types of Nayak and Nayika.

❖   Historical Stories of shiva and parvati creation of Tandav and lasya.

- ❖ Uses of different handgestures.
- ❖ Knowledge of songs along with Korvais and jathi with Taal.
- ❖ Receive the blessings before any stage performance which is stage.

Content :
1. Pushpanjali.
2. Jathiswaram.
3. Understand the use of asamyutta hasta mudra shlokas.
4. Understand the play jathis, teermanams, korvais and songs.

FOURTH SEMESTER

DNCE 204 Literature of Indian Classical Dance-IV (Bharatnatyam)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Theory

Unit – 1
- a) Devadasi tradition in Bharatanatyam.
- b) Acharya Nandikeshwara and Contents of Abhinayadarpan.

Unit – 2
- a) Study of folk dances of india – Bhangara, Kolattam, bihu, Garba and Lavani.
- b) Religious stories related to prestend dance in dance
- ❖ Lord Krishna as a Makhan Chori.
- ❖ Seetha Swayamvara.

Unit-3
- (a) Detailed study of classical dances (Manipuri, Mohiniattam, Satriya)

Unit-4
- (a) Sholakas form Abhinaya darpan – Viniyogas with Shloka from First11 Samyutta hatas.

Unit-5
- (a) Notation of Koutuvam and Shabdam (Jathis and songs) Learnt in syllabus.

DNCE 206L Performance of Indian Classical Dance-IV (Bharatnatyam)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

1. Koutuvam
2. Shabdam
3. Demonstration of the viniyogas from from first 11 Samyuta hatas with Shlokas according to Abhinyadarpan.
4. Rendering Koutuvam and Shabdam (Teermanam and songs) Leaarnt in syllabus.

Learning Outcomes: After the completion of the course, students will be able to:**:**

❖ Following ancient tradition of devadasi.
❖ Understand the regional Different folk dance.
❖ Knowledge of mythological stories (Mahabharta and Ramayana)
❖ Uses of different hand gestures.

Content :

1. Koutuvam.
2. Shabdam.
3. Understand the use of Samyuta hasta mudra Viniyogas.
4. Ability to render songs along with Koravais, Jathis play with taal.

FIFTH SEMESTER

DNCE 305L Performance of Indian Classical Dance-V (Bharatnatyam)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

1. Padam.
2. Keertanam.
3. Demonstration of the viniyogas from Last 12 Samyuta hastas with Shlokas according to Abhinyadarpan.
4. Rendering Padam and Keertanam (Jathis,Koravais and song) Leaarnt in syllabus.

Learning Outcomes: After the completion of the course, students will be able to:

❖ Knowledge of different styles used in Bharatanatyam.
❖ Usually comes through is evolving to the particular taalas in north Indian Taalas.
❖ Uses of different hand gestures.
❖ Knowledge of songs along with Jathis, Koravais play with taal.

Content :

1. Padam.
2. Keertanam.
3. Feeling and emotion these are the factors of creativity..
4. Understand the uses of shlokas.

SIXTH SEMESTER

DNCE 306L Performance of Indian Classical Dance-VI (Bharatnatyam)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

1. Varnam.
2. Thillana.
3. Demonstration of the viniyogas of Shirobhedas with shlokas according to Abhinayadarpan.

4. Ability to render Alarippu with Tattakadi (percussion instrument)
5. Rendering Varnam and Thillana (Trikaal Jathis, Teermanams, Koravais and song) Leaarnt in syllabus.

Stage Performance

Complete Presentation of Any one item of own choice.

Learning Outcomes : After the completion of the course, the students will be able to:

❖ The Natyashastra documents the history behind the development of the arts in India.

❖ It is a theatre and dance treatise of national importance.

❖ Detailed knowledge of Lokdharmi, Natyadharmi, vritti pravirtti and prekshagriha.

❖ Knowledge of Trikaal jathi play with taal.

Content :

1. Varnam.
2. Thillana.
3. Ability to render any one item play with Tattakadi.
4. Will learn Drishtibheda viniyoga with shloka according to abhinaya darpan.

Suggested Readings :

1. P.Ramachandra Shekar, Dance Gestures (Mirror of expressions) Abhinaya darpan.
2. Amit kumar, Famous Dancing guru.
3. Pt. Tirathram azad, Kathak Gyaneshwari.
4. Dr. Puru Dadhich, kathak nritya Shiksha.
5. Vachaspati, Bhartiya Natya Parampara and Abhinaya darpan.
6. Dr. Lakshmi Narayan Garg, Abhnaya Darpan and geet Govind.
7. Manmohan Ghosh, Natyashastra Bahratmuni.
8. Jayalakshmi Eshwar, Bharatanatyam how to.
9. Enakshi Bhavani, The dance in India.
10. Devesh soneji, Bharatanatyam A Reader.
11. Babulal Shukla Shastri, Natyashastra – 1,2,3,4,
12. Ramchndr – Gunchandr, Nataydarpan.
13. Dr. K.madhavi, Bharatnatyam Nritya Vimarsh.

Discipline Elective

MUS 310L Performance of Indian Classical Music (Mridangam)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

1. Pancha Jati playing on Mridangam.
2. Aaditalam 8 matras playing.
3. Laya (Vilambita, Madhya, Druta) on Mridiangam.
4. Jati and tirmanam playing
5. Mridangam Playing on different items.

MUS 309L Performance of Carnatic Music (Vocal)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

1. Sarali Varisa.
2. Janta Varisa.
3. Madhya Sthayi varisa.
4. Alankaram.
5. Geetam (any one)

DNCE 310L Performance of Other Classical Dance (Kuchipudi)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

1. Bhumi Namaskar.
2. Adavu.
3. Jati.
4. Asamyutta and Samyutta Hasta Mudra according to Natyashastra.
5. Sapta Taal playing.

DNCE 311L Performance of Other Classical Dance (Kathak)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

1.   Bhumi Vandana.
2.   Tatakar-thah, dugun, chaugun with Tihai.
3.   Hand movements (Hasta Sanchalana)
4.   Four simple tukdas.
5.   One Chakradhar tukda and two simple Tihai.

DNCE 309L Performance of Rajasthani Folk Dance

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

1.   Basic Pad Sanchalan
2.   Basic Hand movements.
3.   Technique of Anga Sanchalan.
4.   Performance on Rajasthani Dance (any one)
5.   Knowledge of following taals.
     (a)   Teen Taal.
     (b)   Dadara Taal.
     (c)   Kaharwa Taal.
     (d)   Deepchandi Taal.

Indian Music

First Semester

MUS 101 Literature of Indian Classical Music – I

Max. Marks : 100
(CA: 40 + ESA: 60)

L	T	P	C
4	0	0	4

Learning Outcomes : After the completion of the course, the students will be able to:

- Students will be able to understand the literary terms of music.
- Will be able to differentiate the ragas and have the command over writing the notations which is vital part of music.

Content -

Unit 1 (a) Defination & Explainations of the following-

Naad, Shruti, SwarSaptak, That, Raga, Mukhra, Sthai, Antara, Vadi, Samvadi, Anuvadi, Vivadi, Taal, Laya, Matra, Sam, Khali, Avartan, Theka, Alap, Taan, Bolalap, Boltaan, Sargam.

(b) Descriptive study of Khayal, Razakhani Gat and Masitkhani gat.

Unit 2 (a) Developing the understanding of fundamental principles of music.

(b) Detailed study of the Notation system of Pt. Vishnu Narayan Bhatkhande.

Unit 3 (a) Recognition of Ragas from given notes.

Critical and comparative study of prescribed Ragas.

Unit 4 (a) Notation writing of prescribed Talas with Dugun, Tigun, Chougun and Chhagun.

(b) Notation writing of either "ChotaKhayal or Razakhani Gat" in any raga mentioned in the syllabus.

Unit 5 (a) Life sketches and contribution of the following musicians.

Pt.-Vishnu Narayan Bhatkhande and Ustad Ali Akbar Khan.

(b) General study of the evolution and development of Tanpura/Sitar/Violin/Sarod or the instrument offered.

Prescribed Ragas: Yaman, Alhaiya-Bilawal, Bhupali, Deshkar, Vrindabani Sarang.

Prescribed Talas:- Dadra, Kaharva, Trital.

MUS 101L Performance of Indian Classical Music – I

Max. Marks : 100 **L T P C**
(CA: 40 + ESA: 60) **0 0 8 4**

Learning Outcomes : After the completion of the course, the students will be able to:

- Recognition of musical piece and rendering the technical transitions may increase the knowledge of the structure of music and instruments as well.

- Ability to perform in different formations of TIME by practicing/performing with percussions.

Content -

Vocal/Instrumental Duration 45 min. per candidate.

1. Ability to recognize and perform a musical piece/raga after listening to its sung rendition.

2. Recitation of the Tala and its Bols in Dugun and Chaugun while marking the time on hands and recognize the prescribed Talas when they are being played.

3. Enable to reveal the raga through SwarVistar by using Aroh, Avroh and Pakad.

4. Ability to differentiate ragas with each other through Alaap.

5. Ability to perform one BadaKhayal and one ChotaKhayal with five alaap and taans with accompaniment of Tabla.

6. Ability to perform one Masitkhani gat and one Razakhani gat with five alaps and taans with the accompaniment of Tabla.

7. To perform a ChotaKhayal / a Tarana with sufficient alaaps and taans in any two prescribed ragas not used formerly with accompaniment of Tabla.

8. To perform a Razakhani gat with sufficient taans and jhala in any three of the prescribed ragas not used formerly with accompaniment of Tabla.

9. One Razakhani gat should be played in a tala prescribed, other than Teentaal with accompaniment of Tabla.

10. To sing a SargamGeet and LakshanGeet in a same raga which is not used previously.

11. One Bhajan or Lok-Geet.

12. One Dhun or Folk tune for Instrumental.

13. Knowledge of tuning and playing Tanpura.

14. Knowledge of standard tuning of Sitar.

15. Variety of Alankars in any two of prescribed ragas.

16. Ability to pull the Meends of two notes on Sitar.

Prescribed Ragas:- as per theory syllabus.

Prescribed Talas:- as per theory syllabus.

E-Resources -

RaagYaman | Ustad Rashid Khan | Jashn-e-Rekhta 4th Edition 2017

https://www.youtube.com/watch?v=xZbcMHiE7XM

Vilayat Khan Raga Yaman

https://www.youtube.com/watch?v=tGBKs7swowk&t=2239s

padmatalwalkaralhaiyabilawalja re jarejakagavatarana

https://www.youtube.com/watch?v=UjLQvDXxVpY

Vilayat Khan Raga AlhaiyaBilawal

https://www.youtube.com/watch?v=77vtFARtAso

RaagBhoopali (Khayal&Tarana) -byLegendary Duet of Nazakat~Salamat

https://www.youtube.com/watch?v=e95HDnxKf3g

UstadShahidParvez Khan - RaagBhopali - (Sitar And Tabla)

https://www.youtube.com/watch?v=UHXXyYV3cpQ

Venkatesh Kumar: RaagDeshkar

https://www.youtube.com/watch?v=E8CFmo7tRWA

Second Semester

MUS 102 Literature of Indian Classical Music – II

Max. Marks : 100　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　**4　0　0　4**

Learning Outcomes : After the completion of the course, the students will be able to:

- Student will be able to increase their knowledge by descriptive and comparative study of evolution of music from ancient era to till date by inclusively added the forms of music and dances.

- This will be making the students more competitive in the field of fine arts.

Content -

Unit 1 (a) Descriptive study of Shruti-Swar, Vibhajan, in ancient, medieval & modern eras.

　　　　(b) Comparative study of Thaat and Raga.

Unit 2 (a) General study of the development of music from 1st to12th century.

　　　　(b) Detailed study of the Notation system of pt. Vishnu DigamberPaluskar.

Unit 3 (a) Recognition of Ragas from given notes

　　　　(b) Critical and comparative study of prescribed Ragas.

Unit 4 (a) Notation writing of prescribed Tal with Dugun, Tigun, Chougun and Chhagun.

　　　　(b) Notation writing of a ChotaKhayal or Razakhani Gat in any raga mentioned in the syllabus

Unit 5 (a) Life sketches and contribution of the following musicians.

　　　　　　Pt.Vishnu Digambar Paluskar and Ustad Vilayat Khan.

　　　　(b) Knowledge of the salient features of the following Dance Forms-Kathak, Bhartnatyam, Kathkali, Manipuri.

Prescribed Ragas:-Bhairv, Bihag, Shankara, Kafi, Durga.

Prescribed Talas:-Jhaptal, Ektal and Chautal

MUS 102L Performance of Indian Classical Music-II

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes : After the completion of the course, the students will be able to:

- Students will be able to handle the instruments and tune them in the certain scales. This will increase the opportunities for them to start their own business.

- They will be able to seek a career in composing equally in Indian and filmy/light music by developing the ability of composing the musical pieces.

Content:

Vocal/instrumental Duration 45 min./Candidate

1. Ability to identify and perform a musical piece/raga after listening to its rendition.

2. Recitation of the Tala and its Bols in Dugun and Chaugun while marking the time on hands and identify the prescribed Talas when they are being played.

3. Enable to reveal the raga through SwarVistar by using Aroh, Avroh and Pakad.

4. Ability to differentiate ragas through Alaap.

5. Ability to perform one Bada Khayal and one Chota Khayal with five alaap and taans with accompaniment of Tabla.

6. Ability to perform one Masitkhani gat and one Razakhani gat with five alaps and taans with the accompaniment of Tabla.

7. To perform a ChotaKhayal/a Tarana with sufficient alaaps and taans in any two prescribed ragas not used formerly with accompaniment of Tabla.

8. To perform a Razakhani gat with sufficient taans and jhala in any three of the prescribed ragas not used formerly with accompaniment of Tabla.

9. Ability to perform one Dhrupad with Dugun and Chaugun with accompaniment of Pakhawaj or Tabla.

10. One Gat (either fast or drut) should be played in a tala prescribed, other than Teentaal by using layakaries with accompaniment of Tabla.

11. One Bhajan or Lok-Geet.

12. One Dhun or Folk tune for Instrumental.

13. Knowledge of tuning and playing Tanpura.

14. Knowledge of standard tuning of Sitar.

15. Variety of Alankars in any two of prescribed ragas.

16. Ability to pull the Meends of two notes on Sitar

Prescribed Ragas:- as per theory syllabus.

Prescribed Talas:- as per theory syllabus.

E-resources:-

https://www.youtube.com/watch?v=R34akeCzJlU

Prabhaatre-Raagbhairav Bismillah Khan Raga Bhairav

https://www.youtube.com/watch?v=uqNV2eo1OII&t=1020s

Vidushi late SmtVeenaSahasrabuddheRaag, Bihag

https://www.youtube.com/watch?v=j6DlmUaxnhQ&t=1514s

RaagBihag Live ~ Ustad Bade Ghulam Ali Khan &UstadMunawar Ali Khan

https://www.youtube.com/watch?v=5dE6goFUrAw

RaagBehag by PanditBudhaditya Mukherjee and AnindoChatterjee (Tabla) LIVE IN Winterthur, Zurich

https://www.youtube.com/watch?v=mSn4dqe7SLw&t=3058s

Third Semester

MUS 201 Literature of Indian Classical Music – III

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes : After the completion of the course, the students will be able to:

- Students will be able to understand the procedure of making Thaats and its importance in music.
- Students will have the knowledge of compilation of various transitions along with a specific TIME on the paper, to get more expertise in descriptive side of music.
- Will be making a student more illustrative and imaginary.

Content:

Unit 1 (a) Concept and creation of Thaats, selection of 10 thaats out of 32 by Pt. Bhatkhande.

(b) History of Indian music from 13th to 18th century.

Unit 2 (a) Definitions of meend, murki, Ghasit, Jamjama, Krintan and Khatka.

(b) Comparative study of Swaras and Thaats of north and south Indian music.

Unit 3 (a) Identification of ragas from given notes and ability to write minimum 2 Alaps, Taans and Todas.

(b) Critical and comparative study of prescribed Ragas.

Unit 4 (a) Notation writing of prescribed Tal with Dugun, Tigun, Chougun and Chhagun.

(b) Notation writing of a ChotaKhayal or Razakhani Gat in any raga mentioned in the syllabus.

Unit 5 (a) Life sketches and contribution of the following musicians.

Pt.OmkarNath Thakur and UstadAllauddin Khan.

(b) Short essay on any of the following-

1. Importance of music in Human life.
2. Laya in Indian music.
3. Relation of classical and Folk music.

Prescribed Ragas : Bageshree, Bhimpalasi, Khamaj, Jaunpuri, Asawari

Prescribed Talas : Rupak, Tivra, Addha.

MUS 201L Performance of Indian Classical Music –III

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcome :

- Students will be getting the ability to handling and playing instruments.

- They will have a guideline to use different transitions with each other, by help of these, they can furbish their pursued command with a more excellence.

Content:

Vocal/instrumental Duration 45 min./Candidate

1. Knowledge of tuning your own instruments.

2. Ability of singing Alankar in three Ragas in Dugun, Tigun and Chougun.

3. Ability to identify and perform a musical piece/raga after listening to its rendition.

4. Knowledge of difference of Ragas by means of characteristics combination of notes.

5. Knowledge of meend.

6. Recitation of the Tala and its Bols in Dugun and Chaugun while marking the time on hands and identify the prescribed Talas when they are being played.

7. To sing or play Aroh, Avroh and pakad of all prescribed Ragas with swarvistar.

8. Ability to sing two BadaKhayal and one ChotaKhayal using sufficient Alaps, Bolalaps, Sargam and Taans with accompaniment of Tabla.

9. Ability to perform two Masitkhani Gat and one Razakhani Gat with sufficient Alaps, Jod and variety of Taans with accompaniment of Tabla.

10. Ability to perform one Dhrupad with Dugun, Tigun and Chaugun with accompaniment of Pakhawaj or Tabla.

11. To perform a ChotaKhayal / a Tarana with sufficient alaaps and taans in any three prescribed ragas not used formerly with accompaniment of Tabla.

12. To perform a Razakhani gat with sufficient taans and jhala in any three of the prescribed ragas not used formerly with accompaniment of Tabla.

13. One Razakhani Gat should be played in a tala prescribed, other than Teentaal with accompaniment of Tabla.

14. Rendition of one Bhajan or Dhun.

E-Resources

BAGESHREE by KaushikiChakraborty

https://www.youtube.com/watch?v=I9tM2wKGt9I

RaagBageshree | UstadShahidParvez Khan | Sitar | Bazm e Khas | live concert

https://www.youtube.com/watch?v=zLGHqbG_OeU

Bharat RatnaPanditBhimsen Joshi sings Raga Bhimpalas.

https://www.youtube.com/watch?v=-lzurpNhpIQ

KishoriAmonkar - RaagBhimpalasi Live

https://www.youtube.com/watch?v=ddimw49-waw

Pt. Nikhil Banerjee - Raga Bhimpalasi (complete)

https://www.youtube.com/watch?v=YdHe4dTc4Dw

Pt.Ulhaskashalkar - Khamaj

https://www.youtube.com/watch?v=Q02VzLfTv8c

Fourth Semester

MUS 202 Literature of Indian Classical Music – IV

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes : After the completion of the course, the students will be able to:

- Students will be having the idea of complex components of music, like – raga theory and different forms of music along with taal system. It will help them to showcase their intense knowledge of vital elements of music.

- Students will be able to achieve the ability to write essays on musical topics and understand the valuable contribution of Pandits and Ustads of Indian Music.

Content:

Unit 1 (a) Placement of shuddhaswaras on the string of Veena by Pt. Shriniwas and Bhatkhande.

(b) System of 72 "Melas" by Pt. Vyankatmukhi.

Unit 2 (a) Descriptive study of Dhrupad, Dhamar, Tarana, Thumri, Dadra, Tappa.

(b) Detail Study of – Poorvang- Uttarang, Shuddha-Chhayalag and sankeerna Ragas, Sandhiprakash Ragas, Parmel-praveshak Ragas and Ritukalik Ragas (Ragas of the seasons)

Unit 3 (a) Identification of Ragas from given notes and writing some Alaps, Tanas and Todas.

(b) Critical and comparative study of prescribed Ragas.

Unit 4 (a) Notation writing of prescribed Tals with Dugun, Tigun, Chougun and Chhagun.

(b) Notation writing of a ChotaKhayal or Razakhani Gat in any raga mentioned in the syllabus.

Unit 5 (a) Life Sketches and contribution of the following musicians-Pt. Ravi Shankar and Pt. Bhimsen Joshi.

(b) Write short essay on any of the following-

(i) Role of music in Indian society

(ii) Vocational opportunities in music

Prescribed Raagas: Darbarikanhara, Malkauns, Des, TilakKamod, Bhairavi, Chayanat

Prescribed Taals: Ada-Chautal, Dhamar and Panjabi

MUS 202L Performance of Indian Classical Music –IV

Max. Marks : 100

(CA: 40 + ESA: 60)

L	T	P	C
0	0	8	4

Learning Outcomes : After the completion of the course, the students will be able to:

- Understand the implementation of technical terms of performing in various formations of taal.

- Having command over different raga and taal excluding Teen taal which is considered as a basic, primary taal but the most beautiful and used taal in Indian Music system.

- Play with the accompaniment of rhythm in various tempos and taal by using variety of technical transitions and plucking formations.

Content-

Vocal/instrumental Duration 45 min./Candidate

1. Knowledge to tuning your own instruments.

2. Ability of singing Alankar in three Ragas in Dugun, Tigun and Chougun.

3. To sing a given musical piece and identify the Ragas when sung.

4. Knowledge of difference of Ragas by means of characteristics combination of notes.

5. Knowledge of Meend.

6. Recitation of the Tala and its Bols in Dugun and Chaugun while marking the time on hands and identify the prescribed Talas when they are being played.

7. To be rectified enabling to reveal all the prescribed Ragas through SwarVistar by using Aroh, Avroh and Pakad.

8. Ability to sing two BadaKhayal and ChotaKhayal using sufficient Alaps, Bolalaps, Sargam and Taans with accompaniment of Tabla.

9. Ability to perform two Masitkhani Gat and Razakhani Gat with sufficient Alaps, Jod and variety of Taans with accompaniment of Tabla.

10. Ability to perform one Dhamar with Dugun, Tigun and Chaugun with accompaniment of Pakhawaj or Tabla.

11. To perform a ChotaKhayal / a Tarana with sufficient alaaps and taans in any three prescribed ragas used formerly with accompaniment of Tabla.

12. To perform a Razakhani gat with sufficient taans and jhala in any three of the prescribed ragas not used formerly with accompaniment of Tabla.

13. One Razakhani Gat should be played in a tala prescribed, other than Teentaal with accompaniment of Tabla.

14. Rendition of one Bhajan or Dhun.

E-resources:-

Begum Parveen Sultana- DarbariKanada- GharJaane De Chhand Mori Baiyan

https://www.youtube.com/watch?v=ZsnS-4lCffI

Pt. Budhaditya Mukherjee, Raga Darbari, Mehfil festival Nagpur 1982, University Convocation hall

https://www.youtube.com/watch?v=moaiMLIC0nk

N. Rajam Raga DarbariKanada

https://www.youtube.com/watch?v=0PQG5fCEwug

Malkauns by KishoriAmonkar

https://www.youtube.com/watch?v=Pjf6fqwKsqE

RaagMalkaunsPanditBudhaditya Mukherjee with AbhijeetMazumdar
https://www.youtube.com/watch?v=Cwp4xIrKvh8
Pt. UlhasKashalkar - Raag Des
https://www.youtube.com/watch?v=H93FF_7dztg
Pt. BrijBhushanKabra, the great guitar virtuoso playing Raga Desh
https://www.youtube.com/watch?v=DWPjcrmyrD0

Fifth Semester

MUS 301L Performance of Indian Classical Music –V

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes : After the completion of the course, the students will be able to:

-   Command over Shuddha and Mishra ragas.
-   Will be knowing the method of tuning the instruments. Will be able to the and instrument.
-   Will be developing the ability to use the complex and more advanced musical pieces to elaborate a raga by singing Khayals and playing Gats.
-   Will be preparing the students to understand and perform through traditional styles of music rendition.

Content -

Vocal/instrumental Duration 45 min./Candidate

1. Knowledge of Tuning Tanpura, Sitar and Voilin.
2. Ability to sing or play Alankars in any two Ragas in Dugun, Tigun and Chougun.
3. To sing or play given musical piece and idenify the ragas.
4. To show the difference of ragas by means of combination of notes.
5. Knowledge of Meed.
6. Recitation of the Tala and its Bols in Dugun, Tigun and Chaugun while marking the time on hands and identify the prescribed Talas when they are being played.
7. To be rectified enabling to reveal all the prescribed Ragas through SwarVistar by using Aroh, Avroh and Pakad.

8. Ability to sing one Bada Khayal and Chota Khayal using Alaps, Bolalaps, Sargam and Taans in any two prescribed ragas with Tabla.

9. Ability to perform two Masitkhani Gat and Razakhani Gat with sufficient Alapas, Jod and variety of Taans with accompaniment of Tabla.

10. Ability to perform one Dhrupad with Dugun, Tigun, Chougun and Chhagun with accompaniment of Pakhawaj or Tabla.

11. One Razakhani Gat should be played in a tala prescribed, other than Teentaal with accompaniment of Tabla.

12. To perform a Chota Khayal / a Tarana with alaaps and taans in any four prescribed ragas not used formerly with accompaniment of Tabla.

13. To perform a Razakhani gat with taans and jhala in any four of the prescribed ragas used formerly with accompaniment of Tabla.

14. Rendition of one Bajan or Dhun.

Prescribed Ragas:- Hindol, Kamod, Bahar, Kedar, Shuddhakalyan, Miyan Malhar, Pooriyadhanashree

Prescribed Talas:- Tilwada, Addha

E-resources:-

Ustad Rashid Khan - RaagHindol

https://www.youtube.com/watch?v=dlPq6NpICaA

GoswamiGokulotsavjiMaharaj, RaagHindol

https://www.youtube.com/watch?v=SlKlCgx6EWQ

NiraliKartik- EriJaane Na Doongi

https://www.youtube.com/watch?v=Vk6bC266Zp0

Shujaat Khan - "Raga Kamod"

https://www.youtube.com/watch?v=bvFXJOyT5Ss

RaagBahar by Pt.Budhaditya Mukherjee and Pt. AnindoChatterjee

https://www.youtube.com/watch?v=qyYmFe5n-9U

Bhimsen Joshi-Raag Bahar.wmv

https://www.youtube.com/watch?v=8W1n5O7eDa0

PanditVenkatesh Kumar, Raag :Kedar

https://www.youtube.com/watch?v=iErLWp8u3S0

RaagKedar by Kala Ramnath on violin

https://www.youtube.com/watch?v=ftNI33Bbvqc

Sixth Semester

MUS 302L Performance of Indian Classical Music –VI

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Learning Outcomes : After the completion of the course, the students will be able to:

- To promote the understanding of ragas &mishra ragas.
- Ability to tune your own instrument to enable the student understanding and grip.
- Ability to develop vakrachalan of swar instead of straight aaroh&avroh.
- Ability to sing/play badakhayal & chotakhayal /masitkhani & razakhani gats in different taal with different laykari.
- To prepare the students for conventional & traditional style of singing.

Content:

Vocal/instrumental Duration 45 min./Candidate

1. Ability to tune in your own Instrument.
2. Ability to sing or play Alankars in any two Ragas in Dugun, Tigun and Chougun.
3. To sing or play given musical piece and to recognize the ragas when sing.
4. To show the difference of ragas by means of combination of notes.
5. Knowledge of Meed.
6. To know usually the bols with Dugun, Tigun and Chougun to mark time by hands and to identify the prescribed talas when played on Tabla.
7. To be rectified enabling to reveal all the prescribed Ragas through SwarVistar by using Aroh, Avroh and Pakad.
8. Ability to sing two Bada Khayal and Chota Khayal using sufficient Alaps, Bolalaps, Sargam and Taans in any two prescribed ragas with accompaniment of Tabla.
9. Ability to perform two Masitkhani Gat and Razakhani Gat with sufficient Alapas, Jod and variety of Taans with accompaniment of Tabla.
10. Ability to perform one Dhamar with Dugun, Tigun and Chaugun with accompaniment of Pakhawaj or Tabla.

11. One Razakhani Gat should be played in a tala prescribed, other than Teentaal with accompaniment of Tabla.

12. To perform a ChotaKhayal / a Tarana with sufficient alaaps and taans in any four prescribed ragas not used formerly with accompaniment of Tabla.

13. To perform a Razakhani gat with sufficient Alaps, taans and jhala in any four of the prescribed ragas used formerly with accompaniment of Tabla.

14. Rendition of one Bajan or Dhun.

Prescribed Raagas:- Marva, Multani, Patdeep, Hamir, Todi, Jaijaiwanti, Poorvi

Prescribed Taalas:- Jhumra, Deepchandi, Sooltal.

E-resources:-

UstadRais Khan - Raga Marwa

https://www.youtube.com/watch?v=p4Ow6xn3yU0&t=1266s

PtAjoyChakrabortyRaagMarwa- jab loyinachalesaath& guru bin gyan

https://www.youtube.com/watch?v=Kd5B_UoE5Vk

UstadImrat Khan, sitar, RaagMarwa

https://www.youtube.com/watch?v=WUn0FQVpLnk&t=2041s

Smt. Padma Talwalkar Raga: Multani and Des part 1 of 2

https://www.youtube.com/watch?v=4duPf4uRwFs

UstadAmzad Ali Khan - Raga Multani

https://www.youtube.com/watch?v=WWOBuAAK96E

RaagPatdeep by Smt. ShrutiSadolikar

https://www.youtube.com/watch?v=w_vxQ7NbgmE

Sitar Samrat Nikhil Banerjee: Raga Patdeep: AnindoChaterjee: Improved Sound

https://www.youtube.com/watch?v=fC7SB8bO4J8

PtVenkatesh Kumar | Raga Hameer- ChameliPhooliChampa- LIVE in Delhi

https://www.youtube.com/watch?v=A79y7Kcxooo

Discipline Electives

MUS 308L Performance of Indian Classical Music (Tabla)

Max. Marks : 100　　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　　**0　0　8　4**

Learning Outcomes : After the completion of the course, the students will be able to:

-　Definition of terminology such as sam, kaal, khanda, maatra, laya etc.
-　General information about the origin of tabla.
-　Definition of terminology such as kayada, palta, mukhra, tukra,ect.
-　Basic knowledge of Bhatkhande notation system.

Content:

a)　Ability to play ten alphabets in Tabla
b)　Ability to play TeenTal, Kaharwa Tal, Dadra Tal and Rupk Tal in Thah, Dugun and chaugun Laya.
c)　Ability to play Two Kayada and his four Prastar with his Tihai.
d)　Ability to play Two Theke ke Prakar and Two tukda and Two Mohara and Two Tihai.
e)　Ability to recognize.

MUS 307L Performance of Indian Classical Music (Harmonium)

Max. Marks : 100　　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　　**0　0　8　4**

Learning Outcomes : After the completion of the course, the students will be able to:

-　A formal training initiate to students about basic terms like types of notes, different patterns of notes (Alankaars), rhythm and its components with an initial start of learning ragas.
-　Encourage students to play/sing with zeal to get improved at beginning level and heading towards pro level.
-　Will be able to handle the instruments carefully and maintain them by his/her own.

Content -

1. Practical knowledge of Natural (Shudhha) & Converted (Vikrit) notes of the prescribed ragas.
2. Recitation of taals with marking time signature on hands.
3. Practical knowledge of Aroh-Avroh and Pakad in prescribed ragas.
4. One Chhota Khayal with four alaps and four taans or Razakhani/drut gat with four taans in any two ragas from the prescribed ragas.
5. Singing/playing ability to perform ten-ten alankars in all ten thaats.
6. Name of the prescribed ragas- Yaman, Bhoopali and Alhaiya Bilawal.
7. Prescribed taal- Teentaal, Keharwa and Dadra.
8. One Bhajan or National Song (National Anthem for Instrumental music students).
9. Sargam in any two ragas.

E-Resources:-

Yaman

RaagYaman | Ustad Rashid Khan | Jashn-e-Rekhta 4th Edition 2017

https://www.youtube.com/watch?v=xZbcMHiE7XM

Vilayat Khan Raga Yaman

https://www.youtube.com/watch?v=tGBKs7swowk&t=2239s

AlhaiyaBilawal

padmatalwalkaralhaiyabilawalja re ja rejakagavatarana

https://www.youtube.com/watch?v=UjLQvDXxVpY

Vilayat Khan Raga AlhaiyaBilawal

https://www.youtube.com/watch?v=77vtFARtAso

Bhoopali

RaagBhoopali (Khayal&Tarana) -byLegendary Duet of Nazakat~Salamat

https://www.youtube.com/watch?v=e95HDnxKf3g

UstadShahidParvez Khan - RaagBhopali - (Sitar And Tabla)

https://www.youtube.com/watch?v=UHXXyYV3cpQ

MUS 303L Basic Technical Skills for Audio Production

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Content –

1. **Basics of Sound**

   Sound and audio, Frequency of sound, Frequency range of Audible spectrum, Sound recording frequency spectrum.

2. **Musical Instruments/Microphones & audio cables**

   Frequency spectrum of different musical instruments, Characteristics and properties of different microphones, Identifying different microphones and placement techniques according to the instruments during recording, Identifying different audio cables and connectors.

3. **Musical Recording**

   Basic idea of recording mixing console, Musical recording using single track and multitrack recording software like WAVELAB 4.0, ADOBE AUDITION 3.0, NUENDO 3.0

4. **Editing & Mixing**

   Musical editing & mixing using single track and multitrack recording software like WAVELAB 4.0, ADOBE AUDITION 3.0 and NUENDO 3.0

Indian Music (Tabla)

First Semester

MUS 103 Literature of Indian Classical Music – I (Tabla)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After completion of this course, the students will be able to.

1. Develop the knowledge of the origin of Tabla and technical terms.

2. Recognize and apply the hand movements on Tabla.

3. Execute basic etiquettes of the various Taals.

Content:

Unit (a) Definition & explanation of following .

Matra (Beat), Laya, Vibhag, Sum, Tali, Khaali, Avritti or Avartan, Tihai, Nauhakka, Kayada, Prastar (Palta), Mukhda or Mohra, Tukda, Rela.

(b) Basic Knowledge of BaJ.

Unit 2 (a)   A general knowledge of the origin of Tabla.

(b) Detailed study of the Notation system of Pt. Vishnu Narayan Bhatkhande.

Unit 3 (a) Described and study of the various parts of Tabla

(b) Technique of the instrument concerned and how to produce syllabus on it individually and jointly.

Unit 4 (a) Method of writing in notation all the prescribed Talas with their Thekas and Bols.

(b) Notation writing of any Kayada with his prastar and Tihai and Tukda from prescribe Talas.

Unit 5 (a) Life sketch of great exponents of Tabla

1) Pt. Ram Sahai   2) Pt. Visnu Narayan Bhatkhande

(b) Basic knowledge of Gharana.

Prescribed Talas (a) Tintal (b) Jhaptal, Dadra, Kaharwa

Suggested Readings:

1. Mishra, Pt. Chotelal, (2012), Tal Prasun, New Delhi, Kaniska Publication.

2. Garg, Dr. Laxmi narayan (2013), Tal Parichaya, Hataras, Sangeet karyalaya.

3. Srivastava, Girish Chandra (2017), Tal Kosh, Allahabad, Rubi Prakashan.

Online references:
1. www.gandharvapune.org

2. https://www.youtube.com/watch?v=dlmXRR8x5qQ

3. https://www.youtube.com/watch?v=EiXW3ILVjK8

4. https://www.youtube.com/watch?v=Ub1ltSa37KA

MUS 105L Performance of Indian Classical Music - I (Tabla)

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Learning Outcomes : After completion of this course, the students will be able to.

1. To introduces the student to the basics of tabla playing.

2. Perform combined and single hand movements of fingures.

3. To introduce the student basic knowledge of Baj.

4. It is only when these concepts are strong that the learner can take her next steps confidently.

Content:

Practical demonstration of the following:

1. Ability to play Ten Varnas.

2. To play with accompaniment of Harmonium two basic Kayada and his five Prastar and end with Tihai (category - A).

3. To play with accompaniment of Harmonium two basic Rela and his five Prastar and end with Tihai (category - A).

4. To play with accompaniment of Harmonium two basic Mukhdas (category - A).

5. To play with accompaniment of Harmonium two Sada Tukda (category - A).

6. Ability to play all the Talas in Tha and Dugun Laya (category - B).

Prescribed Talas As per Theory Syllabus.

Second Semester

MUS 104 Literature of Indian Classical Music - II (Tabla)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes : After completion of this course, the students will be able to:

1. To introduce the students with complex Tall's and a step higher from the basic level.
2. To give the students merits and demerits of the Tabla players.
3. To prepare students to stage performance and boost confidence.
4. To take the student a step ahead and introduces different laya and some basic embellishments of the taals studied before.
5. To prepare students to stage performance and boost confidence.
6. To invoice of the knowledge of Pt.Vishnu Digambar Paluskar notation system.

Content:

Unit 1 (a) Merits and demerits of the Tabla Players.

(b)   A general knowledge of the different Prans of Tabla.

Unit 2 (a) Definition of the following terms with examples. Paran, Delhi Peshkar, Uthan, Chakradar.

(b) General study of the evolution and development of your instrument.

Unit 3 (a) The Talas that are used in accompaniment to the following style of singing Bada Khyal, Chota Khyal.

(b) A general knowledge of the varieties of Vadya.

Unit 4 (a) Writing in notation of all the Tala prescribed in Taha and Dugun Laya.

(b) Life sketch and the contribution of the following Tabla player

1) Pt. Anokhelal Mishra   2) Ustd. Karamatulla Khan

Unit 5   (a) Notation writing of any Kayada with his Prastar and Tihai and Tukda from prescribe Talas.

(b) Detailed study of the notation system of Vishnu Digambar Paluskar.

Prescribed Talas (a) Tintal, Jhaptal (b) Tilwara, Rupak, Ektal

Suggested Readings:

1. Srivastava girish Chandra Tal Kosh(1996), Allahabad, Rubi Prakashan

2. Singh Dr. jogindar, Bharatiya sangeet ki utpatti avam vikas,(1994) Jalandhar, A.B.S. Prakashan,

3. Mistri Dr. Aban A, Pakawaj Avam Table ke Gharane avam paramparaye,(1984),Mumbai, Pt. k.k.s. jijana swar sadhana samiti.

Online references:

1. https://www.youtube.com/watch?v=zklyTekthsQ

2. https://www.youtube.com/watch?v=Fo7HvzYkpdA

3. https://www.youtube.com/watch?v=Yx0LO281JNs

MUS 106L Performance of Indian Classical Music - II (Tabla)

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	0	0	8	4

Learning Outcomes: After completion of this course, the students will be able to

1. The students is Advance bols that are played on tabla.

2. The students should be able to show these taals with the hands through claps, showing the taali and khaali.

3. The students play theka of taals tearnt in the previous course in single as well as double tempo.

4. Students will be ready to play Teental, Rupak, jhaptal, Ektal, Rupak, Tilwara.

Content:

1. To play with accompaniment of Harmonium Two Basic Kayada and his five Prastar and end with Tihai (category A).

2. To play with accompaniment of Harmonium Two Basic Rela and his five Prastar and end with Tihai (category A).

3. To play with accompaniment of Harmonium Two Sada Tukra (category A).

4. To play with accompaniment of Harmonium Two Chakrdar Tukra (category A).

5. Ability to play prescribe Talas in Taha and Dugun Laya (category B).

Prescribed Talas - As per Theory Syllabus.

Third   Semester

MUS 203 Literature of Indian Classical Music - III (Tabla)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes : After completion of this course, the students will be able to:

1. Delivering the extended understanding to the students about evlution and principles of different aspects study of Indian taal system.

2. To developed the students his mastered the skill of creativity elaborating on a taal learnt, for booth solo performances and as accompaniment.

3. The students able to play a given laya through the presentation.

Content:

Unit 1   (a) Definitions & explainations of Ati Vilambit, Ati drut, jati, Yati, Dupalli, Chaupalli, Lal kila, Gat Quida,

(b) A general study of the South Indian Taal System.

Unit 2   (a) The main characteristics of the different Gharanas of Tabla, how it differentiate between them.

(b) Knowledge of and difference between the two prevalent Tal notation systems Bhatkhande and Vishnu Digamber.

Unit 3   (a)   Basic knowledge of ten Parans of Tabla

(b) Writing taal notation in Adi, Kaudi Layakaries.

Unit 4   (a) Life Sketch of any of the following ustad ahamad jan Thkirawa ustad habiduddin khan

(b) A bsic knowledge of Tal Jati System.

Unit 5   (a) Detailed study of the Vadya Vargikaran system.

(b) The Tal are used in accompany to the following style of singing 1 Bhajan, 2 Dadra, 3Thumri.

Prescribed Talas (a) Tintal, Ektal (b) Deepchandi, Addhatal

Suggested Readings:

1. Godbole Ganesh Madhukar, (1999), Tabla Shastra, Allahabad, Ashok Prakashan Mandir

2. Mayankar Sudhir,(1969),Tabla Vadan kala aur Shastra, Miraz, Sri balav joshi, Gandarv mandal Miraz

Online references:

1. https://www.youtube.com/watch?v=q4u0AEl7xHw

2. https://www.youtube.com/watch?v=-HhLQTm8yTg

3. https://www.youtube.com/watch?v=T4vDUfI-7hw

MUS 205L Performance of Indian Classical Music - III (Tabla)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

1. knowledge of solo performance and accompaniment.

2. Play complex kayada in prescribe taal.

3. The student plays competent enough to elaborate Teen Tal and prescribe taal.

4. The students ablity to play jaati style.

5. The students ablity to play jaati style.

Content -

1. knowledge of the tunning your own instrument.

2. To play with accompaniment of Harmonium Delhi Advance Peshkar and his five Prastar and end with Tihai (category A).

3. To play with accompaniment of Harmonium Delhi Advance Kayda and his five Prastar and end with Tihai (category A).

4. To play with accompaniment of Harmonium Bant and his five Prastar and end with Tihai (category A).

5. To play with accompaniment of Harmonium Advance Rela and his five Prastar and end with Tihai (category A).

6. To play with accompaniment of Harmonium Sada and Faarmayasi Chakradar Tukda (category A).

7. To play with accompaniment of Harmonium Sada Gat (category A).

8. Ability to play all the Talas in Tha and Dugun Laya (categoryB).

Prescribed Talas   As per Theory Syllabus.

Fourth Semester

MUS 204 Literature of Indian Classical Music - IV (Tabla)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After completion of this course, the students will be able to

1. To recognize, what is gharana**.**

2. The objective of practical is to convey the one step advance understanding   of recitation and presentation of a raga and taal.

3. Practical knowledge of handling and tuning the instruments.

4. To give the student detail and comparative study of the development of tabla.

Content:

Unit 1 (a) A Comparative study of the different baj of Tabla.

(b) History of Indian Music from 13th to 18th century.

Unit 2 (a) Definition of the following terms giving examples Rau, Chala or chalan Misil, Bant, Pench, Angushthana, Fard, Charbagh, Dupalli.

(b) Critical and comparative study of prescribe Talas.

Unit 3   (a) Notation writing of prescribe Tal with Dugun, Tigun, Chaugun and Chhagun.

(b) Notation writing of any kayada with four Prastar and Tihai.

Unit 4 (a) Life sketches and contribution of the following musicians. ,

Pt. Samta Prasad, Ustad Habibudiin Khan Ustad Ahamad jan Thkiraswa

    (b) Short essay on any of the following

        1. Laya in Indian music.

        2. Importance of music in Humam Life

Unit 5 (a) Basic knowledge of Gharana.

       (b) A Detail and comparative study of the devlopment of tabla.

Prescribed Talas - Tintal ,Rupak, (b) Adachartal, Dhamar

Suggested Readings:

1. Sharma Sharan Vagawati, (1996), Tal Prakash, Hatras, Sangeet karyalaya.

2. Mishra Pt. Chhotelal,(1996), Tal Prasun, New Delhi, Kaniska Prakashan

3. Mulgaonkar Aravand,(199…..), Tabla, Mumbai, Ramdas bhatkall, Popular Prakashan.

Online references:

1. https://www.youtube.com/watch?v=ASxEJ81lnBw&pbjreload=10

2. https://www.youtube.com/watch?v=Yx0LO281JNs

MUS 206L Performance of Indian Classical Music - IV (Tabla)

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 8 4**

Learning Outcomes: After completion of this course, the students will be able to:

1. Develop appreciation for the art form.

2. Knowledge of tuning your own instrument.

3. The student should be able to play kaaydas, and rela in Teental and Rupak   tal solo for fifteen minutes with the accompaniment of the lehara.

4. The students also being able to read and play bols written on paper is an important skill that has to be mastered her.

Content:

1. Knowledge of tuning your own instrument.

2. To play with accompaniment of Harmonium Delhi Peshkar and his five Prastar and end with Tihai (category A).

3. To play with accompaniment of Harmonium Two advance Kayada and his five Prastar and end with Tihai (category A).

4. To play with accompaniment of Harmonium Two advance Rela and his five Prastar and end with Tihai (category A).

5. One Bant and his five Prastar and end with Tihai (category A).

6. Ability to play all the Talas in Tha and Dugun Laya (category B).

Prescribed Talas   As per Theory Syllabus.

Fifth Semester

MUS 305L Performance of Indian Classical Music - V (Tabla)

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes: After completion of this course, the students will be able to

1. The students able to play various thekas at both ati vilambit as well as drut laya.

2. The students should have the expertise of playing both common taals such as Teental, Jhaptal, Ektal, Rupak.

3. The students also be able to show with the hands the same kayada of a gharana in different taals.

4. The students able to make a comparative study of the styles of playing of different gharanas.

5. The students will be taught some kayadas that begin with the left hand.

Content:

To play with accompaniment of Harmonium Two Kayada and his five Prastar and end with Tihai (category A).

1. To play with accompaniment of Harmonium Two Rela his five Prastar and end with Tihai (category A).

2. To play with accompaniment of Harmonium Two gat kayada and his five Prastar and end with Tihai (category A).

3. To play with accompaniment of Harmonium One Sada Gat and One Darje Dar Gat (category A).

4. To play with accompaniment of Harmonium Two Mukhadas of advance pattern (category A).

5. Padhant by beat of hands of the Thekas of all the prescribed talas with kayada, Gat, Tukda etc.

Prescribed Talas (a) Tintal, Adachartal (b) Pancham Sawa

Sixth Semester

MUS 306L Performance of Indian Classical Music - VI (Tabla)

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

1. To anable the students usderstanding and grip over Layakari.

2. To maximize the potential of students in terms of creativity, and command over every Taal.

3. To enhance the knowledge of students Gat and his three patterns.

4. To gibe them knowledge of tune your own instrument.

5. Knowledge of prescribed Taal in the syllabus.

Content:

Practical demonstration of the following:

1. Ability to tune your own instrument

2. To play with accompaniment of Harmonium Two Kayada and his five Prastar and end with Tihai (category A).

3. To play with accompaniment of Harmonium Two Rela his five Prastar and end with Tihai (category A).

4. To play with accompaniment of Harmonium Two gat kayada and his five Prastar and end with Tihai (category A).

5. To play with accompaniment of Harmonium One Gat Tukda , and One Fard Gat (category A).

6. To play with accompaniment of Harmonium Two Mukhadas of advance pattern (category A).

7. Padhant by beat of hands of the Thekas of all the prescribed talas with kayada, Gat, Tukda etc.

   Prescribed Talas (a) Trital, Adachartal (b) Dhamar, Jat Tal

Discipline Electives

MUS 309L Performance of Indian Classical Music (Vocal)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Content -

1. Practical knowledge of Natural (Shudhha) & Converted (Vikrit) notes of the prescribed ragas.

2. Recitation of taals with marking time signature on hands.

3. Practical knowledge of Aroh-Avroh and Pakad in prescribed ragas.

4. One Chhota Khayal with four alaps and four taans or Razakhani/drut gat with four taans in any two ragas from the prescribed ragas.

5. Singing/playing ability to perform ten-ten alankars in all ten thaats.

6. Name of the prescribed ragas- Yaman, Bhoopali and Alhaiya Bilawal.

7. Prescribed taal- Teentaal, Keharwa and Dadra.

8. One Bhajan or National Song (National Anthem for Instrumental music students).

9. Sargam in any two ragas.

MUS 307L Performance of Indian Classical Music (Harmonium)

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Content -

1. Practical knowledge of Natural (Shudhha) & Converted (Vikrit) notes of the prescribed ragas.

2. Recitation of taals with marking time signature on hands.

3. Practical knowledge of Aroh-Avroh and Pakad in prescribed ragas.

4. One Chhota Khayal with four alaps and four taans or Razakhani/drut gat with four taans in any two ragas from the prescribed ragas.

5. Singing/playing ability to perform ten-ten alankars in all ten thaats.

6. Name of the prescribed ragas- **Yaman, Bhoopali and Alhaiya Bilawal.**

7. Prescribed taal- **Teentaal, Keharwa and Dadra.**

8. One Bhajan or National Song (National Anthem for Instrumental music students).

9. Sargam in any two ragas.

MUS 303L Basic Technical Skills for Audio Production

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Content -

1. Basics of Sound

Sound and audio, Frequency of sound, Frequency range of Audible spectrum, Sound recording frequency spectrum.

2. Musical Instruments/Microphones & audio cables

Frequency spectrum of different musical instruments, Characteristics and properties of different microphones, Identifying different microphones and placement techniques according to the instruments during recording, Identifying different audio cables and connectors.

3. Musical Recording

Basic idea of recording mixing console, Musical recording using single track and multitrack recording software like WAVELAB 4.0, ADOBE AUDITION 3.0, NUENDO 3.0

4. Editing & Mixing

Musical editing & mixing using single track and multitrack recording software like WAVELAB 4.0, ADOBE AUDITION 3.0 and NUENDO 3.0

Management

First Semester

COM 104 Financial Accounting

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Course Objectives:

1. To understand the basics of financial accounting, book-keeping and the accounting principles of GAAP (i.e. concepts and convention).

2. To have an understanding of the rules of debit credit, preparation of various books of accounts (i.e. Journals and ledgers) and statements (i.e. Trial balance, rectification, etc).

3. To foster an understanding of the concept of depreciation including its types and preparation of bills of exchange and bank reconciliation statements.

4. To develop skills for preparation of final accounts through practice of comprehensive questions.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Financial Accounting- Definition & its difference with cost accounting and management accounting, accounting principles (GAAP)- Concepts & Conventions, Capital & revenue, Overview of single entry system.

Unit II Preparation of voucher, Invoices & memos, Rules of Dr. & Cr. Preparation of Journal, Ledger & Cash book-understanding the format

Unit III Trial balance, Rectification of Errors, Bank Reconciliation Statement- Meaning & methods of preparing,

Unit IV Depreciation- Straight Line Method & Written Down Value Method, Accounting for Bills of Exchange, Reserves & Provisions

Unit V Preparation of final accounts- trading, profit & loss account and balance sheet, format, & adjustments

Learning Outcomes : After completion of this course, the students will be able to:

- Have knowledge of book-keeping and financial accounting

- Maintain the basic books of accounts and prepare various statements.

- Process and prepare final accounts i.e. trading, profit and loss accounts and balance sheet.

Suggested Readings:

1. D.K. Goel, Rajesh Goel & Shally Goel. (2019). Accounting (17 ed). New Delhi: Arya Publications

2. T.S. Grewal. (2019). Introduction to Accountancy (19 ed). New Delhi: Sultan Chand

3. M.C. Shukla, T.S. Grewal, S.C. Gupta. (2018). Advanced Accounts (20 ed). New Delhi: Sultan Chand

4. Mukherjee and Mukherjee. (2016). Accounting (10 ed). New Delhi: Sultan Chand

Suggested E-Learning Material:

1. MSG. (2016). *What is Single Entry System:Pros and Cons*. Retrieved from Managment Study Guide: https://www.managementstudyguide.com/single-entry-system-in-accounts.htm

2. MSG. (2018). *What is Accounting*. Retrieved from Management Study Guide: https://www.managementstudyguide.com/financial-accounting-articles.htm

3. Kumar, S. (2017, May 6). *Basic Concept of Accounting*. Retrieved from Youtube: https://www.youtube.com/watch?v=eaJosm9Y5dQ.

4. Badlani, D. (2014, Sep 5). *Financial Statement of Companies*. Retrieved from Youtube: https://www.youtube.com/watch?v=TzBGN1OJS1E.

MGMT 102 Foundation of Management

Max. Marks : 100

(CA: 40 + ESA: 60)

L	T	P	C
4	0	0	4

Course Objectives:

1. To introduce the students to the foundation of principles of management.
2. Practice the process of management's four functions: planning, organizing, leading and controlling.
3. Observe and evaluate the influence of historical forces on the current practice of management.
4. Provide the students with the capability to apply theoretical knowledge in simulated and real-lifesettings.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Evolution of Management Thought: Scientific, Administrative, Human relations, Systems.

Unit II Importance, Definition and Nature of Management.Functions of Managers.Skills vs Levels of Management, Relevance of Management Principles for all Spheres.

P1anning: Concept, Purpose, Process, Types of Plans Decision Making, MBO.

Unit III Organizing: Concept, Purpose, Process, Organizational Structure, Elements of Organizational Structure: Departmentation, Delegation, Decentralization, Span of Management, Work Specialization, Observer of Staffing.

Unit IV Leading: Concept and Importance**.** Leadership Styles, Theories of Leadership - Trait, Behavioral: Blake & Mouton, Ohio State, Michigan University, Situational**:** Path Goal Theory, Fiedler's Contingency Theory. Role of a Leader**.**

Unit V Controlling: Concept, Purpose, Process, Types. Cultural context, Practices and Work Ethics of American, Japanese and Indian Organizations and their Comparative Analysis. Managerial learning from the struggle of Indian freedom fighters

Learning Outcomes : After completion of this course, the students will be able to:

- Evaluate the global context for taking managerial actions.
- Understand conflict resolution, motivation and leadership
- Understand various theories and management principles.

Suggested Reading:

1. Tripathi, P. C. & Reddy, P. N. (2017). Principles of Business Management, (22 ed.) Tata McGraw Hill, New Delhi

2. Robbins & D. Cenzo. (2017). *Fundamentals of Management (10ed)*, New Delhi, Pearson Education Asia

3. Prasad, L.M. (2005). *Principles and Practice of Management (9ed)* .Sultan Chand & sons, New Delhi

4. Weihrich & Koonts. (2019). *Management-A Global Perspective (19 ed)*, Tata McGraw Hill, New Delhi

Suggested E-Learning Material:

1. Prachi, J. (2016). *Planning Function of Management*. Retrieved from Management Study Guide: https://www.managementstudyguide.com/planning_function.htm

2. Amit,L. (2018, December). *Controlling: Features, Process and Types*. Retrieved from: https://www.youtube.com/watch?v=JRVXfaFrMEM

3. Brian, T. (2017, May 11). *Different Types of Leadership Styles*. Retrieved from: https://www.youtube.com/watch?v=vilZazhIjoc

4. Chandan,P (2017, September 26). *Organising:Meaning,Process and Types*. Retrieved from https://www.youtube.com/watch?v=XrmJG_8d9Cg

Second Semester

COM 101 Business Environment

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives:

1. To acquaint the students with the critical elements of business environment and their impact on Business Decisions

2. To provide students with an awareness of current Business trends and an overview on Indian Economy, MNC's and Union Budget

3. To exposing students about general principles of Company Law Such As Company, Memorandum of Association, Article of Association and winding up of companies

4. To understand the role of Director in a company according to Company Law and understanding of meetings, resolutionsand dividends

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I   Introduction to business and its characteristics, Meaning and nature of business environment, macro and micro environment, social responsibility of business, business current affairs

Unit II Introduction to Indian economy-Characteristics problems and solutions

Industrial policy 1991- provisions and approval privatization, globalization, and MNC- need advantage and Indian experiences, introduction to union budget

Unit III Definition of company, nature, types, procedure of registration, memorandum of association, article of association, winding up a company

Unit IV Shares and debentures-types, allotment, Procedure and principles, Transfer of shares-physical and electronic (Demat)

Unit V Directors-position, appointment, disqualification, Power and duties, Types of meeting, Minutes, Types of resolution, provisions regarding dividend. Insolvency and Bankruptcy Code, 2016: Introduction, Corporate Insolvency Resolution Process, Liquidation of a Corporate Person."

Learning Outcomes : After completion of this course, the students will be able to:

- Interpret the impact of Micro & Macro environment on Business Decision
- Learn about factors affecting social orientation of Business
- Understand the basic concepts related with Indian economy, Industrial Policy, 1991 and Union Budget.
- Learn about Company registration process.
- Understand process of winding up of a company.

Suggested Readings:

1. Cherunilam, F. (2016). Business Enviornment Text and Cases (25 ed.) Mumbai: Himalaya Publishing House
2. Ghosh, B. N. (2015). Business Environment (1ed). Oxford University Press.
3. Kapoor, N.D. (2016). Elements of Company Law (30 ed) New Delhi. Sultan Chand & Sons.
4. Pandey, I.M. (2015). Financial Management (11ed.) Noida. Vikas Publishing House Pvt. Ltd.

Suggested E-Learning Material:

1. MSG. (2014). *Capitalization in Finance*. Retrieved from Managment Study Guide:
   https://www.managementstudyguide.com/capitalization.htm
2. Philip,T.(2017,April). *Directors: Duties & Liabilities*. Retrieved from: https://www.youtube.com/watch?v=b8y2vIuTrP4
3. Hitbulleye(2016, January 7). *Basics of Indian Economy*. Retrieved from: https://www.youtube.com/watch?v=CnF_M050g4o
4. Shashi,A.(2018, October 10). *Industrial Policy 1991*. Retrieved from https://www.youtube.com/watch?v=EWqqaVkix6g

MGMT 104 Group Behaviour

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives:

1. To familiarize the students with the fundamentals of group and group dynamics.
2. To develop the understanding of students on how people as a group can be managed in teams for organizational effectiveness.
3. To help students to develop the competencies they will need to become successful employees, managers, and leaders.
4. To expose students to various group management activities for better understanding of team dynamics.

Note: The paper will contain ten questions having at least two questions form each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Content:

Unit I   Groups- Classification of groups, Reasons for group formation, stages of group Development, Punctuated equilibrium model, Group norms, Status, Cohesiveness and size, External conditions imposed on groups.

Unit II   Teams- Meaning, Difference between team and group, Types of teams, Creating effective teams, Turning individuals into team players.

Unit III Organizational culture- Meaning, Functions and dysfunctions of culture, creating and sustaining culture.

Change process, individuals' response to change, Overcoming resistance to change.

Unit IV Conflict- concept, transition in conflict thought, process, Dunctional and dysfunctional conflict, Reasons for conflict, Conflict management.

Unit V   Stress- Meaning, Sources, Consequences, Managing stress.

Power and authority- Bases of power, difference between power and authority.

Learning Outcomes : After completion of this course, the students will be able to:

- Understand group dynamics and basics of teamwork.

- Understand organizational culture and change management within the organizations.
- Understand stress and reasons behind stress within organization.

Suggested Reading:

1. Robbins, S.P.&Sanghi, S. (2009). *Organizational Behavior*. (13ed.). Delhi: Pearson Education.

2. Luthans, F. (2011). Organizational Behavior. (11d.). Irwin: McGraw Hill Publication

3. Pareek, U. & Khanna, S. (2012). Understanding Organizational Behavior. (3ed.). Delhi: Oxford University Press.

4. Prasad, L.M. (2011). Organizational Behavior. (5ed.). New Delhi: Sultan Chand and sons.

Suggested E-Learning Material:

1. MSG.2014). Organization Culture - Introduction. Retrieved from Managment Study Guide: https://www.managementstudyguide.com/organization-culture-articles.htm

2. MeanThat.(2015,June). *Defining and Classifying Groups*. Retrieved from: https://www.youtube.com/watch?v=6IXqnie_y0w

3. Vidya Mitra (2016, October). *Concept of Power and Authority* . Retrieved from : https://www.youtube.com/watch?v=h0sq7XgDDBI

4. UNICOM(2016,Nov). *Conflict Management*. Retrieved from https://www.youtube.com/watch?v=xEHQcxaLr2s

Third Semester

MGMT 103 Foundations of Marketing Management

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Course Objectives

1. The objective of this course is to demonstrate and stimulate students to appreciate the various issues and activities involved in marketing management.

2. To provide an understanding of the underlying concepts, strategies and issues involved in exchange of products and services between the firm and markets.

3. To understand the distribution process, its types and factors affecting the choice of distribution channels.

4. To understand the promotion mix and various components of promotion mix.

Note: The paper will contain ten questions having at least two questions form each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Marketing Concept & Approaches of Marketing, Market planning, Marketing Environment, Marketing Mix, Concept of Market Segmentation, Targeting & Positioning.

Unit II Product Mix: Type of products, Product mix & product line decision, New- product development, Product life cycle, Branding & packaging decision.

Unit III Product Pricing: Pricing concepts, Understanding price, Setting the price, Methods of pricing, Price Adaptations, Initiating and Responding to price changes.

Unit IV Distribution: Distribution channel & Type of channels of distribution and Factors effecting choice of distribution channels, Channel Management.

Unit V Promotion: Promotion Mix, Objectives & Types of Advertising, Major Advertising Media, Integrated Marketing Communication concepts, Meaning Objective & Tools of Sales Promotion, Basic concepts of Personal Selling & Publicity.

Learning Outcomes : After completion of this course, the students will be able to:

- Understand various issues and activities involved in marketing management and they stimulate their thinking in this direction specially those who wants to pursue their carrier in this field.

- Understand different concepts, strategies and issues they are involved in exchange of products and services between the firm and the markets.

- Understand distribution process and factors affecting the choice of distribution channels

- Understand promotion mix and various components of promotion mix

Suggested Readings:

1. Kotler, Philip, Keller Kevind Lane, Koshy Abraham and JhaMithileshwar (2013). *Marketing Management. A South Asian Perspective (*14 ed.). New Delhi: Pearson education.

2. Ramaswamy and Namakumari (2013). *Marketing Management* (5 ed.) New Delhi: McMillan.

3. Gandhi, C. J (1985). *Marketing a management introduction* (1 ed.)*.* New Delhi: Tata McGraw Hill.

4. Stanton, William J. (1984). *Fundamentals of Marketing* (10 ed.). New Delhi: MC Graw Hill.

5. Etzel, M. J., Walker, B. J. & Stanton, William J. (1994). *Marketing Concept & Cases Special Indian Edition* (10 ed.). New Delhi: Tata Mc Graw Hill.

6. McCarthy, and Perreault (2002). *Basic Marketing, A Global Marketing Approach* (15 ed.). New Delhi: Tata Mc Graw Hill.

Suggested E-Learning Material:

1. Prachi,J.(2016).Classification of Advertising. Retrieved from Managment Study Guide: https://www.managementstudyguide.com/classification-of-advertising.htm

2. Evan,C.(2014,May). *Pricing Strategies*. Retrieved from: https://www.youtube.com/watch?v=4t_MEO_la_k

3. Alanis Business Academy (2016, November). *The product Mix*. Retrieved from : https://www.youtube.com/watch?v=9y65-JDDifM

4. Tim,F. (2012,March). *Marketing Concept*. Retrieved from https://www.youtube.com/watch?v=5DfqPccGUgc

MGMT 205 Foundation of Human Resource Management

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives:

1. To provide the students with the basic knowledge of Human Resource Management frameworks and overall role of HRM in business,

2. To develop insight into the managerial skills required to effectively manage people in an organization, in order to achieve corporate goals successfully.

3. To advance students' cognitive skills and processes, their knowledge of theory and application, and develop their professional skills.

4. To strengthen the student's understanding how the alignment of human resources strategy within the organization as a whole.

Note: The paper will contain ten questions having at least two questions form each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Human resource management- Meaning, Definition, Scope, organization of human resource department, Policies, Principles, evolution of human resource management from personnel management.

Unit II Human resource planning- Meaning, Definition, Importance, objectives and the factors influencing human resource planning, demand forecasting techniques, Supply forecasting techniques.

Unit III Recruitment-Definition, Purpose, Importance, Factors influencing recruitment, process, Sources of recruitment. Selection-meaning, role, process, Placement in organization.

Unit IV Training and development- Definition, Difference between training, education and development, Importance, Process, Learning Principles, Methods of training.

Unit V Performance appraisal-Meaning, Definition, Process, Methods of performance appraisal, performance appraisal errors.

Learning Outcomes: After completion of this course, the students will be able to:

- Effectively manage and plan key human resource functions within organizations
- Proficiency in fundamental HR policies and practices that help to promote the organization's strategic goals
- Understand Human Resource Development.

Suggested Readings:

1. Gupta, Shashi K. & Joshi, Rosy. (2014). *Human Resource Management* (1 ed.*)*, New Delhi.:Kalyani Publishers,

2. Rao, V.S.P. (2005). *Human Resource Management-Text and Cases*,(2 ed.) New Delhi: Excel Books

3. Dessler, Gary. (2011). *Human Resource Management*, (13 ed.) New Delhi: Pearson

4. Ivancevich, John, M. (2016). *Human Resource Management* New Delhi (11 ed.) : McGraw Hill Education Pvt. Ltd.,

5. Pattanayak, Biswajeet. (2014). *Human Resource Management*, (4 ed.) New Delhi: PHI Learning Pvt. Ltd.,

Suggested E-Learning Material:

1. Morris, S. (2017, Feb 07). *Is Human Resource Management the Right Career for You?* Retrieved from   Youtube: https://www.youtube.com/watch?v=Jp7oM9mAIXQ

2. Calicut University (2014). *Human Resource Management* Retrieved from: http://www.universityofcalicut.info/cuonline/exnotif/ex5462.pdf

3. E-HRM Web Guide. *Human Resource Management* Retrieved from: http://panosa.org/wp-content/uploads/2015/01/resource1.pdf

4. Sommerlatte, S. (2018, Nov 19). *Should Employees be Informed About the Assessment of Their Potential?* Retrieved from: https://www.youtube.com/watch?v=CoDWJFKEhdc.

Fourth Semester

COM 211 Principles and Practices of Banking

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives:

1. To understand the basics of banking system of India.

2. To understand the functionalities associated with banking which affect the normal individuals' life.

3. To understand the banking operations and various norms related to banking instruments and negotiable instruments.

4. To provide the knowledge about credits, deposits and other important aspects related to retail banking.

Note: The paper will contain nine questions having a compulsory case study in any one unit. Candidates are required to attempt five questions taking at least one question from each unit. Case Study will be compulsory.

Course Contents:

Unit I Introduction to Indian Banking Structure, Legal Aspects of Banking: Definition, Licensing requirement of banks, Permitted and Prohibited Business, Capital requirement of Banks, Qualification of Board of Directors. RBI act 1934 and functions of RBI, Banking Regulation Act 1949.

Unit II Rates fixed by RBI: CRR, SLR, MSFR, MCLR, Repo and Reverse Repo rate, Call Rate. KYC &AML policy, Banking Ombudsman, Introduction to Basel Accord, Various Ratios of latest Basel Accord

Unit III Retail Baking:Types of Deposits, Customers and accounts. Account Opening in name of limited companies, clubs, associations, government departments, trust and co-operative societies, types of NRI accounts. FD Return to Depositors and Taxation issues (numerical Problems)

Unit IV Banker Customer Relationship: legal Implications, types of relationship, obligation of banks, precautions. Rights of banks: type of lien, right to set off, concept-mandates, power of attorney, garnishee order and attachment order

Unit V Negotiable Instruments: Key features, Cheque v/s bill exchange, crossing –concept, type, endorsement-concept, type, CTS system of clearing and its importance, holder and payer in due course. Banker's duties and responsibilities as paying banker and as a receiving banker, Electronic fund transfer: NEFT, RTGS, IMPS, ECS.

Learning Outcomes : After completion of this course, the students will be able to:

- To understand the banking operations.
- To advice and guide in basic banking operation.

Suggested Reading:

1. Gopinath, M. N. (2017). Banking Principles and Operations (7 ed.). Mumbai: Snow White Publications.

2. IIBF. (2017). Legal and Regulatory Aspects of Banking (3 ed.). Mumbai: Macmillan.

3. IIBF. (2017). Principles & Practices of Banking (3 ed.). Mumbai: Macmillan.

4. IIBF. (2017). Retail Banking (3 ed.). Mumbai: Macmillan.

5. Vinay Dutta, K. S. (2013). Commercial Bank Management (1 ed.). Mumbai: Tata McGraw Hill.

Suggested E Learning Materials

1. Verma, N. (2018, September 27). *History of Banking in India in Brief*. Retrieved from Gradeup: https://gradeup.co/history-of-banking-in-india-i-e02deb86-f4ac-11e5-b410-2f0cca4d3c07.

2. MSG. (2014). *Case Study of the Indian Banking and Financial Services Industry using Strategic Tools*. Retrieved from Managment Study Guide: https://www.managementstudyguide.com/case-study-of-indian-banking-and-financial-services-industry.htm.

1. Nishtha Pareek, M. D. (2018, Decemeber 1). *Emerging Trends in Banking*. Retrieved from https://www.youtube.com/watch?v=gCBs313D46g:

2. IIBM Institute of Business Management, (2017, Oct 8). *Principle and Practice of Banking*. Retrieved from Youtube: https://www.youtube.com/watch?v=eBXsl4Wz3C0.

MGMT 202 Basics of Financial Management

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives:

1. To introduce the students to the basics of financial management.
2. To understand the role of financial manager to give them an input into various concepts.
3. To develop an understanding about techniques of financial analysis.
4. To understand the practicality of the capital structure planning, cost of capital, dividend policies and working capital.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Overview of financial management, Principles, Nature and scope of financial management, Profit maximization v/s wealth maximization, Stakeholder wealth maximization

Unit II Fundamental Valuation: Time value of money, Rationale, Future value of a single amount, Future value of an annuity, Present value of a single amount, Present value of an annuity, Concept of risk & return, types of risk, Diversification, Concept and advantage

Unit III Financial Analysis- Techniques of financial analysis, Ratio analysis: Advantages, Liquidity ratios, Turnover ratios, Profitability ratios, Leverage ratios

Unit IV Working Capital Management: Nature and concept, factors influencing working capital, Computation of working capital, Leverage: concept, DOL, DFL, DTL

Unit V Capital Budgeting: meaning and importance, cash flows v/s accounting profit, evaluation techniques – Pay Back Period, NPV, IRR, Cost of capital: basic concepts, measurement of specific costs- Cost of Equity and Debt

Learning Outcomes : After completion of this course, the students will be able to:

- Aware about capital structure and theories of capital structure.
- Understand the cost of capital in wide aspects.

- Understand working capital management

Suggested Reading:

1. Avadhani (2010). *Financial Management (8 ed)*. New Delhi: Himalyan Publication .

2. Chandra (2015). *Financial Management (11 ed)*. Tata McGraw Hill: Tata McGraw Hill.

3. Jain, K. &. (2007). *Financial Management (7 ed)*. New Delhi: Tata McGraw Hill.

4. Kishore (2016). *Financial Management (8 ed)*. New Delhi: Taxman.

Suggested E-Learning Material:

1. Helfert, A. (2001). Financial Analysis and Tools and Techniques. Retrieved from http://alqashi.com/book/book17.pdf.

2. Saha, D. (2019). Working Capital Management.ppt. Retrieved from https://www.scribd.com/doc/98098428/WORKING-CAPITAL-MANAGEMENT-ppt.

Fifth Semester

MGMT 203 Bhartiya Prabandhan

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Course Objectives:

1. The primary purpose is Self-Realization

2. To introduce the students to the basics of Indian Management thought and practice.

3. To generate awareness about the cultural and spiritual values of Indian society and their implications for modern managers.

4. To understand Indian Philosophical Thoughts from Vedant and BhagwadGeeta.

5. To provide the knowledge about eastern and western management, social management, wisdom workerand other important aspects related to BhartiyaPrabandhan.

Note: The paper will contain nine questions having a compulsory case study in any one unit. Candidates are required to attempt five questions in taking at least one question from each unit. Case Study will be compulsory.

Course Content:

Unit I Concept of Indian culture, Rationale for Indian management, Management system in Arthshastra

Unit II Gandhian thought for management of Indian organizations, Trusteeship, Swadeshi, Creative leadership, Vivekananda and his concept of work as worship, Vivekananda's ideas on Vedant.

Unit III Arrival of Best to lead the rest, Management Wisdom: The Common Man's Management Theories

Unit IV Towards convergence between Eastern and Western Management, PanchmukhiVikas, Development Matrix for social management, Wisdom worker, Doctrine of Karma

Unit V Management ideas from Bhagwad Geeta, Motivation-Indian insights, Value system of individual, Stress Management

Learning Outcomes: After completion of this course, the students will be able to:

- Understand ancient Indian spiritual teachings and their relevance in present day life.

- Have a value oriented approach in their everyday life.

Suggested Readings:

1. Bansal, I. (2002). *Management Concepts in Ancient Indian Psycho-Philosophic Thought and their Significance for Present Day Organizations (1 ed.)*, Jaipur: Popular Book Depot.

2. Sharma, S. (1996). *Management in New Age: Western Windows, Eastern Doors (2 ed.)*, New Age International Publication.

3. Sharma, S. (2007). *New Mantras In Corporate Corridors From Ancient Roots To Global Routes (2 ed.).* New Delhi: New Age Int. Pvt. Ltd.

4. Chatterjee, B. K. (2002). *Arindam Chaudhuri, Count Your Chickens before They Hatch(1ed.),* New Delhi: Vikas Publishing House (2001).

5. Dasgupta, Ajit K. (1993). *A History of Indian Economic Though*t (ed. 1). London and New York: Routledge history of economic thought series.

Suggested E-Learning Material:

1. Joshi, A. (2018, Jan 3). *Indegeneous Management System an introduction.* Retrieved Feb 12, 2019, from www.youtube.com: https://www.youtube.com/watch?v=q5K2Hff85MM

2. Joshi, A. (2016, Dec 7). *Management from Bhagwad Geeta :A Few Insights.* Retrieved Feb 18, 2019, from Shastriya Prabandhan - A Bharatiya Design Thinking Approach to Education and Management: http://ankurjoshi.in/bhagwad-gita-management/

3. Sharma, S. (1999, Oct 1). *Corporate Gita: Lessons for Management, Administration and Leadership.* Retrieved March 1, 2019, from journals.sagepub.com: https://journals.sagepub.com/doi/10.1177/097168589900500203

4. Sharma, S. (2006, Jan). *Management In New Age: Western Windows Eastern Doors.* Retrieved Feb 21, 2019, from www.researchgate.net: https://www.researchgate.net/publication/304935846_Management_In_New_Age_Western_Windows_Eastern_Doors

5. *Swami Vivekananda Chicago Speech on 15th September,1893.* (2013, Aug 12). Retrieved Jan 5, 2019, from www.youtube.com: https://www.youtube.com/watch?v=TlwZNmgFBWM

Sixth Semester

MGMT 309 Organizational Studies

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Course Objectives:

1. Develop the knowledge about corporate social responsibility and growth ofIndian companies

2. To understand the role and importance of building social institutions and their critical role in society.

3. Equip students with multiple perspectives on leadership and organization.

4. *Studies* the *role* of corporate and managerial communication in the context of innovation, entrepreneurship and change.

Note: The paper will contain nine questions having a compulsory case study in any one unit. Candidates are required to attempt five questions in taking at least one question from each unit. Case Study will be compulsory.

Course Contents:

Unit I Corporate Codes and Ethics, Whistle Blowing, Insider Trading. The new age organization: Flipkart, Amazon, **Paytm.** Startup Companies.

Unit II Rebuilding trust: managing organizations in crisis: case studies of Nestle Maggie, Johnson & Johnson, Nokia, Cadbury's. Realigning for business success - case studies of Bajaj Auto, HLL, and LIC.

Unit III Global growth of Indian companies like TATA, Infosys, MTR, BIOCON, Patanjali, Make my trip**,** AXIS bank, State Bank of India, Mahindra and Mahindra.

Unit IV Study of the lives of individuals who built organizations - JRD Tata, DheerubhaiAmbani (Reliance industry), G.D. Birla, Kiran Mazumdar-Shaw.

Unit V Building social institutions like SEWA. NGOs in Human Development.Civil Society &NGOs.Study of Social mission societies like AMUL, SARAS, Lijjat, SulabhSauchalya.

Learning Outcomes : After completion of this course, the students will be able to:

1. The students will able to develop the concept on organizational studies and need of CSR and strengthen the knowledge about the growth of Indian companies.

2. Make the role clarity of consumer and brands in building trust for each other and the strategies implemented to gain consumer loyalty.

3. Equip students with multiple perspectives on leadership and organization.

4. Students will be aware about the CSR approaches adopted by the individuals.

5. Students will understand the role and importance of building social institutions and the critical role they play in the society.

Suggested Readings:

1. Baxi, C. V. & Prasad, A. (2005). *Corporate Social Responsibility: Concepts and Cases: The Indian Experience* (1 ed.), Excel Books India.

2. Piramal, G. (2010). *Business Legends*. (1 ed.), Penguin UK.

3. Ghoshal, S., Piramal, G. & Bartlett, C. A. (2002). *Managing radical change: What Indian Companies Must do to Become World-Class (1 ed)*. Penguin Books India.

4. Ovasdi, J. M. (2006). *Management of non-governmental organizations (5 ed.): towards a developed civil society*. Mcmillan.

5. Kitson, A. & Campbell, R. (1996). In *The Ethical Organisation* (pp. 97-117). Palgrave, London.

Suggested E-Learning Material:

1. Parkasha, T. E. (2018, Feb 16). *IQ,EQ,SQ importance.* Retrieved March 1, 2019, from You tube.com: https://www.youtube.com/watch?v=1CK1naCVttw

2. Skill You Need. (n.d.). *Negotiation and Persuasion sSkill.* Retrieved Feb 21, 2019, from www.skillsyouneed.com: https://www.skillsyouneed.com/ips/negotiation.html

3. Study.Com. (n.d.). *Creativity, Innovation, and Change and the Knowledge Economy.* Retrieved Feb 20, 2019, from study.com: https://study.com/academy/lesson/creativity-innovation-and-change-and-the-knowledge-economy.html

4. The Balance Career. (n.d.). *Creative Thinking Definition, Skills, and Examples.* Retrieved Feb 22, 2019, from www.thebalancecareers.com: https://www.thebalancecareers.com/creative-thinking-definition-with-examples-2063744

Discipline Electives

COM 312 Personal Finance

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives:

1. To understand the concept of personal finance, personal financial planning process & personal financial statement analysis.

2. To understand the concept of Retirement planning and estate planning.

3. To understand the concept of tax planning and investment planning

4. To understand the concept of financial literacy and role of regulators in promoting financial literacy.

Note: The paper will contain nine questions having a compulsory case study in any one unit. Candidates are required to attempt five questions in taking at least one question from each unit. Case Study will be compulsory.

Course Contents:

Unit I Personal Finance: Introduction, Goals, Need, Personal Financial Statements,Personal financial planning process, Life cycle approach to financial planning, Components of financial plan, developing financial plan. Budgeting: Principles of Successful Budgeting, Spending money wisely, Time value of Money, careers in personal finance advisory.

Unit II Investment Avenues: Principles of successful investing, overview of securities markets, factors controlling investment returns, Types of investment options available to an individual investor, building successful investment portfolio.

Unit III Introduction to Bank and Banking services, Type of accounts, Types of deposits, KYC, Types of loans, deposit, credit and investment services offered by commercial banks, care while using mobile banking, mobile applications, internet banking etc.

Unit IV Insurance: Importance, need, principles of insurance, Types of life insurance, health insurance, Home & Liability Insurance. Estate

Planning: Objectives of will and creating a valid will and power of attorney.

Unit V   Retirement Planning: Principles, stages and steps in retirement planning, Tax planning: importance, PAN, Heads of Income, Tax saving under section 80C, Role of RBI, NISM, SEBI and others in promoting financial literacy in India.

Activities:

1. Understand the requirements for your Personal Financial Plan.
2. Develop and implement a budget.
3. Understand the joy of giving back to society.
4. How to use retirement Planning calculator.
5. Using other financial calculators.
6. How to advise someone about financial planning process.
7. Proactive and reactive ways to deal with Investment frauds and low quality financial services.

Learning Outcomes : After completion of this course, the students will be able to:

- Understand the requirements of Personal Financial Plan can develop and implement a budget.
- Use retirement planning calculators and other financial calculators.
- Understand Proactive and reactive ways to deal with Investment frauds and low quality financial services.

Suggested Readings:

1. Halan, M. (2018). Let's Talk Money: You've Worked Hard for it, Now Make it Work for You. (1 ed.) New Delhi: Harper Business
2. Mirashi, S. (2012). I Can Do-Financial Planning. (4 ed.) New Delhi: Academic Foundation
3. Proschool , I.M.S. (2015). Investment Planning (1 ed.). New Delhi: Tata Mc-Graw Hill
4. Proschool , I.M.S. (2015). Tax Planning (1 ed.) . New Delhi: Tata Mc-Graw Hill
5. Gopinath, M.N. (2011). Banking Principles and Operations. (3 ed.). Mumbai: Snow white Publications.
6. Proschool , I.M.S. (2015). Introduction to Financial Planning (1ed.). New Delhi: Tata Mc-Graw Hill

Suggested E-Learning Material:

1. Kagan, J. (2017, Oct 3). *Retirement Planning.* Retrieved Feb 25, 2019, from www.investopedia.com: https://www.investopedia.com/terms/r/retirement-planning.asp

2. MSG. (2018, Aug 3). *Introduction-to-personal-finance.html.* Retrieved Feb 28, 2019, from Management Study Guide: https://study.com/academy/lesson/introduction-to-personal-finance.html

3. Nishtha Pareek, M. D. (2018, Decemeber 1). *Emerging Trends in Banking*. Retrieved from https://www.youtube.com/watch?v=gCBs313D46g:

4. RBI. (n.d.). *Financial Education and RBI.* Retrieved March 1, 2019, from rbi.org.in: https://rbi.org.in/financialeducation/home.aspx

5. Sud, R. (2017, June 13). *Why India needs to work on financial literacy now more than ever.* Retrieved March 1, 2019, from www.livemint.com: https://www.livemint.com/Opinion/f5xo11OSPqxGWUdaWKVb8J/Why-India-needs-to-work-on-financial-literacy-now-more-than.html

MGMT 308 Operations Management

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Course Objectives:

1. To familiarise students with the important functions of production and operations management.
2. To understand factors influencing plant location, layout and capacity decisions.
3. To know about the production systems in the manufacturing organization..
4. To study how scheduling and sequencing of the activities are done in the manufacturing facility.
5. To understand about the need of inventory and quality control.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents

Unit I Introduction to production & operation management; Facility location: nature, location factors, location models; facility layout: nature, objective, principles & types; types of production systems.

Unit II Work design: Work study approach, method study & work measurement, importance & objectives of work study, time & motion study, basic work study procedure, method analysis, work measurement techniques (Numerical for time study & work sampling technique); preventive maintenance & break-down maintenance.

Unit III Capacity planning, production planning & control line balancing, aggregate planning, operation scheduling & Job standards.

Unit IV Inventory management: meaning, types of inventory, inventory cost, factors influencing inventory management & control, inventory control techniques, material requirement planning.

Unit V TQC, TQM, statistical process control (X, R, & P. Chart), just in time, Kaizen.

Learning Outcomes : After completion of this course, the students will be able to:

- Understand the important functions of the Production and operations management.
- Deals with the decision making in planning for Location, process,
- Plan layout, scheduling and sequencing of facility.
- Control the inventory, and manufacturing process, in both manufacturing and service organization

Suggested Readings

1. Aswathappa, K. & Shridharam, B. K. (2009). Productions and Operations Management (2 ed.). New Delhi: Himalaya Publishing House.

2. Russell, R.S. & Taylor, B.W (2007). Operations Management – Quality and competitiveness in a Global Environment (5 ed.). New Delhi: Wiley.

3. Chary, S.N. (1999). Production and Operations Management, New Delhi: Prentice Hall of India.

4. Panneerselvam, R. (2004). Production and Operations Management (2 ed.). New Delhi: Tata McGraw Hill.

Suggested E-Learning Material:

1. Bhardwaj, M. V. (2017, May 28). TQC vs TQM. Retrieved Feb 15, 2019, from You Tube: https://www.youtube.com/watch?v=WlRbP3gLsoI

2. Inmam, R. A. (n.d.). CAPACITY PLANNING. Retrieved March 1, 2019, from www.referenceforbusiness.com: https://www.referenceforbusiness.com/management/Bun-Comp/Capacity-Planning.html

3. Linda.com from Linkedin. (n.d.). Types of inventories. Retrieved Jan 10, 2019, from www.lynda.com: https://www.lynda.com/Project-Management-tutorials/Types-inventories/731733/783236-4.html

4. Wisdomjobs.com. (n.d.). PRODUCTION AND Production And Operation Management Introduction Production and Operations Management. Retrieved Feb 21, 2019, from www.wisdomjobs.com: https://www.wisdomjobs.com/e-university/production-and-operations-management-tutorial-295/production-and-operation-management-introduction-9433.html

MGMT 208 Retail Environment in Management

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Course Objective:

1. Demonstrate an understanding of how retailers develop a retail mix.

2. Explain how retailers use marketing communications to build a brand image and customer loyalty.

3. Understand the integration of merchandise management and supply chain strategies leading to excellent customer service.

4. Understand the financial implication of strategic retail decisions

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Content:

Unit I Retailing: Concept scope and characteristics, Evolution of retail in India, Drivers of retail change in India, Challenges to retail development, Emerging organizations, Debates over FDI and larger stores, Careers in retailing.

Unit II Trends in retail in Asia and the world, Retail models and theories of retail development, Classification of retailers on the basis of ownership, Operational structure and merchandise offered, Non store retailing.

Unit III Retail strategy, Mission and purpose of organization situation analysis, Strategic alternatives, International expansion, Retail value chain

Unit IV Financial aspects of retail: Costing, Revenue and profit margin planning, Measures of performance, Measuring store and space performance, Measuring employee productivity, Ethics in retailing.

Unit V Legal issues in retailing: various laws and their implications, security issues and their management, Managing relations with customers, Competitors, Suppliers, Employees, society and government, emerging opportunities and challenges in international market, retail opportunities in rural areas and corporate response, Case studies.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand supply chain management, merchandising, buying, retail pricing, store management, store layout & design.

- Learn how small and large retail organizations are structured, gain an understanding of basic retail operations, acquire knowledge of the various types of retailers.

Suggested Readings:

1. Bajaj, Tuli, Srivastava (2016).Retail Management (3 ed.), Oxford University Press

2. Pradhan, S. (2009). Retailing Management (4 ed.) Tata McGraw Hill

3. Berman & Evans. (2010) Retail Management: A Strategic Approach (5 ed.), Pearson Education

Suggested E Learning Material

1. Burke, R. (2014). *How stores track your shopping behavior.* Retrieved from https://www.youtube.com/watch?v=jeQ7C4JLpug.

2. Romero, T. (2016). *Technology will change retail shopping - but it's not what you think*. Retrieved from https://www.youtube.com/watch?v=TuD3IerTOms

COM 210 Emerging Banking Services

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Course Objectives

1. To understand the global banking system and the emerging Indian scenario in banking industry.

2. To understand changing service dynamics of banks in India, alternative banking channels, smart apps, payment banks.

3. To study the concepts of banking, third party products, credit & Investment services etc.

4. To study Asset Reconstruction Companies (ARC's), its model and benefits to the parties involved, NPA Management, SARFESI Act and MSME.

Note: The paper will contain nine questions having a compulsory case study in any one unit. Candidates are required to attempt five questions in taking at least one question from each unit. Case Study will be compulsory.

Course Contents:

Unit I Overview of global banking system, Changing scenario of Indian banking, Direct banking channels, Smart apps. Changing service dynamics of banks in India CRM, Introduction to Payment banks, Small Finance Banks. case studies –growth of SBI, ICICI bank and other emerging banks

Unit II Fixed and Floating interest Rate, Principles of lending, Credit Scoring Models: Hybrid & Behavioral, Retail loan organization structure. Retail Loan products: Home loans, Home Equity Loans, Vehicle loans- Car and Two Wheelers, Consumer Loans, Education Loans, Personal Loans, LAS & LAP

Unit III Corporate Banking: Difference between Retail and Corporate Banking, RBI Guidelines for Regulation of lending, Features of credit, Term loan and its appraisal, Working Capital assessment & various Methods,

Unit IV Management of NPA's: Asset classification, Norms for NPA, Impact of NPA's on Banks, Credit rating & Pricing of Loans, Modes of creating charge in credit, Letter of Credit, pre shipment and post shipment financing. Travelers Cheque, prepaid Currency cards.

Unit V Introduction to third party products i.e. types of Life insurance, types of mutual funds, Types of General Insurance etc. Bancassurance : Principles and types, CAMELS rating.

Learning Outcomes: After completion of this course, the students will be able to:

- Know about banking scenario in India as well as globally.
- Know about various banking products including third party products.
- Know about the recent financial reforms for NPA management.

Suggested Reading:

1. Gopinath, M. N. (2017). Banking Principles and Operations (7 ed.). Mumbai: Snow White Publications.
2. IIBF. (2017). Legal and Regulatory Aspects of Banking (3 ed.). Mumbai: Macmillan.
3. IIBF. (2017). Principles & Practices of Banking (3 ed.). Mumbai: Macmillan.
4. IIBF. (2017). Retail Banking (3 ed.). Mumbai: Macmillan.
5. Vinay, Dutta, K. S. (2013). Commercial Bank Management (1 ed.). Mumbai: Tata McGraw Hill.

Suggested E Learning Material

a. Omarini, A.(2015) *Introduction: From Banking to Retail Banking* Introduction. Retrieved from https://link.springer.com/chapter/10.1057/9781137392558_1

b. Dedu.V, Duna, A.F,(2011). *The Importance of Banks in Foreign Exchange and the Implications of the Currency Risk over the Bank Management.* Retrieved from: https://ideas.repec.org/a/rom/rmcimn/v12y2011i6p291-295.html.

c. NCUAchannel (2016, Jul 28). What is a CAMEL Rating? Retrieved from Youtube: https://www.youtube.com/watch?v=RWwsNG_9_uc

d. Bansal, A. (2017, Mar, 7). *SARFAESI,* Retrieved from
   Youtube: https://www.youtube.com/watch?v=Wg1nRsXWcxg

LAW 209 Intellectual Property Law

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Course Objectives:

1. To create consciousness amongst the learners about Intellectual Property and different rights relating to it.

2. To create awareness regarding the jurisprudential basis of the intellectual property rights

3. To familiarize the learners with the history of IPR and different aspects of GATT, WTO and TRIPS

4. To familiarize the learners about the registration procedures and the administrative procedures relating to IPR in India

Note: The paper will contain 10 questions having at least 2 questions form each unit. Candidates are required to attempt 5 questions in all taking at least 1 question from each unit.

Course Contents:

Unit I Introduction of Intellectual Property Law**:** Subjects Matter and Scope of Intellectual Property Law, Nature of Rights under Intellectual Property Law, Need for Law on Intellectual Property Rights, Definition of Intellectual Property Rights, Historical origin of Intellectual Property Law, A Background to TRIPs Agreement, Structure of TRIPs Agreement, National Prospective on TRIPs

Unit II Copyright: Meaning, Nature of Copyright. International Conventions on Copyright, subject matter of Copyright. Main feature of the Copyright Act, 1957, Definition of Copyright, Authorship and Ownership of Copyright: Rights conferred by Copyright, Copyright Board, Copyright Society, Performers Right, Licenses, Infringement of Copyright, Remedies against Infringement of Copyright.

Unit III Patents: Origin of Patent, Main features of the Patents Act, 1970. The Conceptual overview of Patentability, International Agreement on Patent, Patent Co-operation Treaty, Subject matter of Patent, Procedure for obtaining the Patent, Transfer of Patent, Revocations of Patent, Infringement of Patent.

Unit IV Trademarks: Origin of Trademarks, International agreements and Trademark, Main Features of the Trade Marks Act, 1999, Registration of Trademarks Property in Trademark, Assignment, Licensing of Trademark, Infringement of Trademarks, Remedial Measures, Passing off action.

Unit V Other Intellectual Property Rights: Industrial Design, Geographical Indications, Traditional Know-how, Plant Varieties & Farmers Rights.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the laws related to Intellectual Property Rights

- Use the principles of various IP laws.

- To assess the ways in which legislation and global policy influence the socio-economic environment in India and abroad.

Suggested Reading

1. Ahuja, V. K. (2016). *Law Relating to Intellectual Property Rights.* 2 ed Gurgaon, LexisNexis.

2. Narayana, P. (2017). *Intellectual Property Law 3ed* Kolkata, Eastern Law House.

3. Sreenivasulu, N. S. (2018). *Law Relating to Intellectual Property.* 2 ed Gurgaon: Universal Law Publishing

4. Wadhera, Dr. B. L. (2018). *Law Related to Intellectual Property Right*. 5 ed New Delhi: Universal Publisher.

Suggested E-Learning Materials:

1. Trade Related Aspects of Intellectual Property Rights (2018, January 15). <https://www.wto.org/english/docs_e/legal_e/27-trips_01_e.htm>

2. What is Intellectual Property? (2017, December 26) <https://www.wipo.int/about-ip/en/>

3. Traditional Knowledge and IPR (2018, January 15) <https://www.wipo.int/pressroom/en/briefs/tk_ip.html>

4. Ludwig, S. Peter &Gogoris, Adda C. (1998) The GATT-TRIPS Agreement—What it is and How it Has Changed the Playing Field for All Applicants for United States Patents, <https://www.sciencedirect.com/science/article/pii/S0167450198800289>

Leading Cases:

1. *Aerotel v. Telco & Macrossan's Application* (UK, 2006)
2. *Eldred v. Ashcroft*, 537 U.S. 186 (2003)
3. *Najma Heptulla v. Orient Longman Ltd. &Ors.*, AIR 1989 Delhi 63, 1988 (2) ARBLR 302 Delhi
4. *R.G. Anand v. M/s Delux Films &Ors*, AIR 1978 SC 3123
5. *Eastern Book Company &Ors. v. D.B. Modak&Ors.*, 101 (2002) DLT 205
6. *Parker v. Flook*, 437 U.S. 584 (1978)
7. *Diamond v. Diehr*, 450 U.S. 175 (1981)
8. *Bilski v. Kappos*, 130 S. Ct. 3218, 561 US, 177 L. Ed. 2d 792 (2010)
9. *Continental Can Company USA, Inc. and Continental Pet Technologies, v. Monsanto Company, Hoover Universal, Inc. and Johnson Controls, Inc*., 948 F.2d 1264 20 US.S.P.Q.2d 1746
10. *Ampro food products v. Ashok Biscuit Works*, AIR 1973 AP
11. *Texla Metals &Pvt. Ltd. V. Anil Bhasin*, 2001 OTC 146, Del.
12. *B.K. Plastic Industries v. JayantilalKalidasSayani*, AIR 1972, Cal 339
13. *Glaxo Smithkline Consumer Healthcare Gmbh and Co. Kg. v. Amigo Brushes Pvt. Ltd*. 2004 14 ILD 357 Del.
14. *Joginder Singh v. Tebu Enterprises (P) Ltd*., AIR 1989, Del 16
15. *Rotela Auto Components (P) Ltd. &Anr v. Jaspal Singh &Ors*, 2002(24) PTC 449 del.

MGMT 305 E-Business

Max. Marks : 100   L   T   P   C
(CA: 40 + ESA: 60)   4   0   0   4

Course Objectives:

1. To understand the various concepts involved in e-Business & e-Commerce
2. To develop an understanding about the aspects like business models, advantages, payment system, legal issues of e-business
3. To gain insight into the concepts of e-CRM, e- SCM, ERP, e-Procurement in e- business.

4. To understand the meaning of concepts like online promotion-bankingand crowd-sourcing.

Note: The paper will contain nine questions having a compulsory case study in any one unit. Candidates are required to attempt five questions in taking at least one question from each unit. Case Study will be compulsory.

Course Contents:

Unit I Advantage of Internet for various users, Concept of E-Commerce & E- Business, its advantages & history, forces fueling, Case study of ITC eChoupal, Channel Conflict-Evaluate if and how both offline and on-line Business Models can be Pursued Simultaneously. Effects of Internet & web on Business-Strategy, Structure & Process.

Unit II Business Models: advertising, brokerage, utility, mixed etc. Concept of Disintermediation, Horizontal & Vertical Market Places in E-Commerce, Impact of E-Business & Social Media on a single functional area Viz., Marketing - case study Branding in the Digital Age, website creation & Digital Marketing-Session Cum Workshop by industry Expert.

Unit III Concept & advantages: e-CRM, e-SCM, ERP, e- Procurement, direct marketing & customer service, introduction to online auction mechanism.

Unit IV Internet & Promotion: types of online promotions- banners, splash screens etc. strategies- push / pull, online catalogues, advantage & Challenges, Introduction to e-banking & advantages Crowd Sourcing-Concept & benefits.

Unit V Electronics Payment System: concept, advantages, security systems, cybercrimes, ethical issues in e-commerce, I.T. Act & implications, future of e-commerce

Learning Outcomes: After completion of this course, the students will be able to:

- Compare and evaluate both offline and on-line modes of shopping.
- Know about Marketing & Branding in digital age, e-banking-CRM, e- SCM and ERP
- Understand about upcoming areas like digital marketing, e-commerce logistics, e-supply chain management as their career option.

Suggested Reading:

1. Kalakota, R.,Whinston, A. (2013). *Frontiers of Electronic Commerce* (13 ed.). New Delhi: Pearson.

2. Turban, E., Lee, J, King, D & Chung ,Michael H. (2003). *Electronic Commerce:A Managerial Perspective* (4 ed.). New Delhi: Pearson.

3. Mohammad, Rafi A (2003). *Internet marketing* (2 ed.). Mumbai: Tata McGraw Hill.

4. P.T.Joseph, S.J (2015). *E-Commerce - An Indian Perspective* (5 ed.).Delhi: PHI.

Suggested E-Learning Material:

1. Brooke, J. (n.d.). *7 Types of Online Advertising.* Retrieved Jan 20, 2019, from www.adskills.com: https://www.adskills.com/7-types-of-online-advertising/

2. Diaz, C. (n.d.). *What is E-Commerce? Definition, Differences With Other Terms and First Steps to Follow if You Want to Launch Your E-Commerce.* Retrieved Feb 23, 2019, from www.doofinder.com: https://www.doofinder.com/en/blog/what-is-e-commerce

3. Stevenson, M. (2015, Feb 15). *Electronic Payment Systems.* Retrieved March 1, 2019, from www.youtube.com: https://www.youtube.com/watch?v=I3RWfRrmxDw

4. Study.com. (n.d.). *Enterprise Resource Planning: Using ERP to Integrate Business Processes.* Retrieved Feb 22, 2019, from study.com: https://study.com/academy/lesson/enterprise-resource-planning-using-erp-to-integrate-business-processes.html

Mathematics

First Semester

MATH 106 Introduction to Calculus

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: On completion of the course, the student will be able to,

- Apply the concept and principles of differential and integral calculus to solve geometric and physical problems.
- Evaluate various limit problems both algebraically and graphically
- Differentiate and integrate the functions which are applicable in real life situations.
- Interpret the geometric meaning of differential and integral calculus
- Apply differentiation to find linear approximation, extrema, monotonicity, and concavity of functions.

Unit 1 Tangents and normals, Subtangent and sub-normal (Cartesian & polar forms), Derivative of an arc (Cartesian and polar), Pedal equations, Curvature.

Unit 2 Partial differentiation with Euler's theorem and its applications, Total derivative, Change of variables (polar to Cartesian and Cartesian to polar), Concept of tangent plane and normal to a surface. Maxima and minima of two variables including method of undetermined multipliers.

Unit 3 Asymptotes, Multiple points, Curve tracing (Cartesian, Parametric and Polar), Envelops & Evolutes.

Unit 4 Reduction Formulae, Double and Triple Integrals, Change of order of integration in double integrals, Change of variables in multiple integration.

Unit 5 Quadrature, Rectification, Volume and Surface of solids formed by revolution.

Text Books:

1. Narayan S., & Mittal P. K. (2007). Differential Calculus (30th ed.). New Delhi, Sultan Chand & Sons.
2. Narayan S., & Mittal P. K. (2007). Integral Calculus (36th ed.). New Delhi, Sultan Chand & Sons.

Reference Books:

1. Kishan H. (2007). *Differential Calculus*, New Delhi , Atlantic Publishers.
2. Ram Babu (2010). *Engineering Mathematics*, Pearson Education.
3. Kreyszig E. (2007). *Advanced Engineering Mathematics* (9th ed.), John Wiley.

Suggested E-learning material:

1. Single Variable Calculus

   https://ocw.mit.edu/courses/mathematics/18-01sc-single-variable-calculus-fall-2010/

2. Differentiation of two variables

   https://nptel.ac.in/courses/111104085/21

3. Multiple Integral

   https://nptel.ac.in/courses/111104085/29

STAT 104 Introduction to Probability and Statistics

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On completion of the course, the student will be able to:

- Compute numerical quantities that measure the central tendency and dispersion of a set of data.
- Understand basic probability axioms and rules and the moments of discrete and continuous random variables as well as be familiar with common named discrete and continuous random variables.
- Apply general properties of the expectation and variance operators.
- Understand the properties and fitting of the Normal, Binomial and Poisson distribution.
- Fit the straight line, second degree parabola and curves of type: ab^x and ax^b
- Understand the concept of Correlation (Karl Pearson) and Linear Regression.

Unit 1 Theory of probability, Law of total and compound probability, Conditional probability, Baye's theorem, Random variable,

Discrete random variable, Continuous random variable, Distribution function.

Unit 2 Measures of central tendency, Measures of dispersion, Moments, Sheppard's correction (without proof), Skewness and Kurtosis.

Unit 3 Mathematical expectation, Addition and multiplication theorem of expectation, Moment generating functions, Cumulants and cumulant generating functions.

Unit 4 Discrete and continuous probability distributions: Binomial, Poisson and Normal distributions with important properties. Fitting of Binomial, Poisson and Normal distributions.

Unit 5 The principle of least squares and curve fitting, Fitting of straight line and second degree parabola, Fitting of the curves of type: ab^x and ax^b; Correlation (Karl Pearson) and Linear regression.

Text Books:

1. Goon, A. M., Gupta, M. K. & Gupta, B. D. (1968). *Fundamental of Statistics.* (Volume I). Kolkata, The World Press Pvt. Ltd.

2. Rohtagi, V. K. (2008). *An Introduction to probability Theory and Mathematical Statistics.* (2nd ed.). John Wiley & Wiley Eastern.

Reference Books:

1. Mood, A. M., Graybill, F. A. & Boes, D. C. (1974). *Introduction to Theory of Statistics*. McGraw-Hill International.

2. Johnson. R. A., Miller, I. & Freund. J. (2011). *Probability and Statistics For Engineers.* Prentice Hall.

3. Feller, W. (1968). *An introduction to probability theory and its applications.* (*Volume I*) , (3rd ed.), John Wiley & Sons.

4. Gupta, S. C. & Kapoor, V. K. (2013). *Fundamental of Mathematical Statistics* (11th ed.). Sultan Chand Publication, New Delhi.

5. Gupta, S. P. (2017). *Statistical Methods* (17th ed.). Sultan Chand & Sons, New Delhi.

Suggested E-learning material:

1. Probability and Mathematical Statistics; Platform:

   http://www.math.louisville.edu/~pksaho01/teaching/Math662TB-09S.pdf

Second Semester
MATH 101 Analytical Solid Geometry

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the basic applications of analytic and solid geometry.
- Understand geometrical terminology for planes, tetrahedron, spheres, parabolids, hyperboloids and ellipsoids.
- Visualize and represent geometric figures and classify different geometric solids.

Unit 1 Plane, Straight line.

Unit 2 Equations of two skew lines in simplest form, Line intersecting two lines, Locus of a line intersecting three given lines, Intersection of three planes, Volume of a tetrahedron.

Unit 3 Sphere: Equation of Sphere through four given points, Plane Section of a sphere, Intersection of two spheres, Intersection of a sphere and line, Power of a point, Tangent plane, Plane of Contact, Pole and Polar, Condition for orthogonality, Radical- Plane, Line, center, Coaxial system of spheres. Cylinder.

Unit 4 Cone, Enveloping Cone, Enveloping Cylinder

Unit 5 The Central Conicoids (Referred to principal axes), Tangent plane, Polar plane, Equation of the normal to an ellipsoid, Number of normals from a given point to an ellipsoid, Cone through six normal.

Text Books:

1. Golas P. C., Tandon O. P., & Bhargava S. L. (1999). *Analytical Solid Geometry*. Jaipur Publishing House.

Reference Books:

1. Narayan, S. & Mittal, P. K. (2004). *Analytical Solid Geometry*. New Delhi, S. Chand.
2. Loney, S. L. (1962). *Co-ordinate Geometry.* London, MacMillan.
3. Chatterji, P. N. (2009). Solid Geometry. Meerut, Rajhans Agencies.

4. Sharma, B. D., Tyagi, B. S. & Brahma Nand (2016). *Co-ordinate Solid Geometry*. Meerut, Kedarnath Publishing House.

Suggested E-learning material:

1. Plane and solid Geometry:
   http://www.aproged.pt/biblioteca/planeandsolidgeometry.pdf

2. Solid Geometry introduction:
   http://altairuniversity.com/wp-content/uploads/2014/02/HM_SolidGeomintro.pdf

3. Math handbook of formulas, Process & Trics:
   http://www.mathguy.us/Handbooks/GeometryHandbook.pdf

MATH 104 Differential Equations

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: On completion of this course, the student will be able to:

- Identify the type of a given differential equation and apply the appropriate analytical technique for finding the solution.
- Solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
- Create and analyze mathematical models using first order differential equations to solve application problems.
- Determine solutions to the linear and nonlinear ordinary differential equations of first and second order.
- Determine the complete solution of a differential equation with constant coefficients by variation of parameters
- Evaluate the Laplace and Inverse Laplace transform of functions of one variable

Unit 1 Solution of differential equations of first order and first degree, Solution of differential equations of first order and any degree, Applications of first order differential equations.

Unit 2 Singular solutions & extraneous loci, Trajectories of a family of curves, Orthogonaltrajectories.

Unit 3 Linear differential equations with constant coefficients, Homogeneous linear differential equations.

Unit 4 Linear differential equations of second order: The complete solution in terms of known integral, Method of removal of first derivative (or Reduction to normal form or Change of dependent variable), Transformation of equations by changing the independent variable, Method of variation of parameters.

Unit 5 Laplace transform: Definition, Laplace transform of certain elementary functions, Change of scale property, First and second translation properties, Laplace transform of derivatives, Inverse Laplace transform: Definition, Change of scale property, First and second translation properties, Inverse Laplace transform of derivatives.

Text Books:

1. Raisinghania, M. D. & Aggarwal, R. S. (1983). Ordinary and partial differential equations (2nd ed.). New Delhi, S. Chand.

2. Sneddon, I. N. (1979). The use of integral transforms. New Delhi, Tata Mac Graw-Hill.

Reference Books:

3. in SI metric units (1st ed.). Singapore, McGraw-Hill Book Company.

Suggested E-learning material:

1. Separable, homogeneous, exact, Linear differential equations, Laplace transform https://nptel.ac.in/courses/122104018/7

2. Open course in Differential Equations (All topics) https://nptel.ac.in/courses/111106100/

3. Open course in Differential Equations (All topics) https://swayam.gov.in/course/3787-differential-equations

4. Second order linear differential equation with constant coefficient https://ocw.mit.edu/courses/mathematics/18-03sc-differential-equations-fall-2011/

5. Laplace transform https://www.math.ust.hk/~machas/differential-equations.pdf

Third Semester

MATH 201 Abstract Algebra

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- To demonstrate the mathematical maturity of understanding the proof.
- To understand the definition of a group and be able to test a set with binary operation to determine if it is a group.
- To find the order of elements of groups.
- To identify subgroups of a given group, cycle groups, normal groups.
- To understand permutation groups and be able to decompose permutations into 2-cycles.
- To grasp the significance of the concepts of homomorphism, isomorphism, and automorphism and be able to check a given function is one of these.
- To classify groups up to isomorphism.
- To identify a set with to binary operation forms a ring or not.
- To really understand the special types of rings and be able to construct new examples from the old ones.
- To check a subset of a ring is an ideal or not and be able to identify proper and maximal ideal.

Unit 1 Divisibility in Z, division algorithm, greatest common divisor, Euclidean Algorithm, modular arithmetic, Binary Operations, Group: Definition, examples and properties of group.

Unit 2 Subgroups, Cyclic groups, Permutation group, symmetric and alternating groups of degree n, external direct products of groups.

Unit 3 Cosets, Lagrange's theorem, Homomorphism and Isomorphism of group, Cayley's theorem, Normal subgroups and Factor groups.

Unit 4 Fundamental theorem of homomorphism of group (First, Second and third theorem of isomorphism).

Rings: Definition and examples, Integral Domain, Division ring, fields

Unit 5   Ideal, Principal ideal, Principal ideal domain, Factor ring, Prime ideal, Maximal ideal, Ring homomorphism and ring isomorphism.

Text Books:

1. Gallian, J. A. (2013). *Contemporary Abstract Algebra* (8th Ed.). Cenage Learning.

Reference Books:

1. Hillman, A. P. & Alexandersor, G. L. (2015). *Abstract Algebra: A First Undergraduate Course* (5th Ed.) CBS Publishers & Distributors Pvt. Ltd.

2. Fraleigh, J. B. (2003). *A First Course in Abstract Algebra* (7th Ed.). Pearson.

3. Sen, M. K., Ghosh, S., Mukhopadhyay, P. & Maity, S. K. (2019). *Topics in Abstract Algebra* (3rd Ed.). University Press.

4. Khanna, V.K. & Bhambri, S. K. (2008). *A Course in Abstract Algebra* (3rd ed.). New Delhi: Vikas Publication House.

5. Herstein, I. N. (1991). *Topics in Algebra* (2nd ed.). New Delhi: Wiley Eastern

Suggested E-learning material:

1. https://ocw.mit.edu/courses/mathematics/18-703-modern-algebra-spring-2013/related-resources/

2. https://www.extension.harvard.edu/open-learning-initiative/abstract-algebra

MATH 206 Real Analysis

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Think about basic proof techniques and fundamental definitions related to the real number system.
- Understand the concept of real-valued functions, limit, continuity, and differentiability.
- Find expansions of real functions in series forms.

- Demonstrate some of the fundamental theorems of analysis.
- Develop the capacity to solve real integral while understanding of integrable functions.

Unit 1 Set, Function, Bounded and unbounded set, Supremum and Infimum of a set, Limit point, Closure of a set, Closed and Open set, Interior and boundary point. Description of the real number system as a complete ordered Field, Analytic properties of real number system.

Unit 2 Real sequences and their convergence, Cauchy sequence, Convergence of series: Comparison test, Root test, Ratio test, Raabe's test, De Morgon's and Bertrand's test, Gauss test, Logarithmic and Integral test, Leibniz test.

Unit 3 Real valued function, Limit of a function, Continuous function and their properties, Heine's theorem, Uniform continuity.

Unit 4 Derivability, Rolle's theorem, Lagrange's mean value theorem, Cauchy's mean value theorem, Taylor's and Maclaurin's theorem, Power series, Expansion of $\sin x$, $\cos x$, $\log (1+x)$, $(1+x)^n$ and e^x.

Unit 5 Riemann integration, Properties of Riemann integrals, Fundamental theorem of integral calculus, Pointwise and uniform convergence, M_n-test, Weierstrass M-test, Abel's test, Dirichlet's test, Uniform convergence and continuity, Term by term differentiation and integration.

Text Books:

1. Malik, S.C. (2004). Principles of Real Analysis. New Delhi, India: New Age International.

Reference Books:

1. Apostol, T.M. (1985). Real Analysis. New Delhi, India: Narosa Publishing House.
2. Royden, H.L. (1993). Real Analysis. New York: Macmillan.
3. Rudin, W. (1985). Principles of Mathematical Analysis. Auckland: McGraw Hill.

Suggested E-learning material

1. Real Analysis; NPTEL:https://nptel.ac.in/courses/111106053/

Fourth Semester

MATH 202 Introduction to Linear Algebra

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Understand vector spaces over a field and subspaces and apply their properties.
- Understand linear independence and dependence.
- Find basis and dimension of a vector space, and understand change of basis.
- Compute linear transformations, kernel and range, and inverse linear transformations, and find matrices of general linear transformations.
- Find eigenvalues and eigenvectors of a matrix and of linear transformation.
- Understand inner product on a vector space.
- Understand the concept of orthogonality in inner product spaces.
- Create orthogonal and orthonormal bases: Gram-Schmidt process.

Unit 1   Vector space over a field, Vector subspaces, Algebra of vectors, Linear sum and direct sum of subspaces, Linear combination, Linear span, Linear dependence and independence of vectors and its properties.

Unit 2   Basis and dimension of vector space and subspace, Linear mappings, Kernel and Range of linear mapping, Singular and non-singular mappings, Linear operator, Algebra of linear operators, Invertible operators.

Unit 3   Matrix representation of a linear transformation, Change of basis, Range rank and Kernel nullity of a matrix, Elementary transformations, Matrix inversion with elementary transformations, Normal form of a matrix.

Unit 4   Matrix polynomials, Characteristics polynomial of a matrix, Characteristics values, Characteristics vector, Cayley-Hamilton theorem, system of linear equations.

Unit 5   Inner product spaces, Orthogonality, Orthogonal sets and bases, Projection of a vector, Gram-Schmidt orthogonalization process,

Fourier coefficients, Introduction to Linear Functional with simple examples.

Text Books:
1. Sheldon, A. (1996). *Linear algebra done right* (2nd ed.). Springer.
2. Krishnamurthy, V., Mainra,V. P. & Arora, J. L. (1976). *An introduction to linear algebra*. New Delhi, East-West Press.

Reference Books:
1. Friedberg, S. H., Insel, A. & Spence, L. (2016). *Linear algebra*. (4th Ed.). Noida (U.P.), India Pearson
2. Halmos, P. R. (2013). *Finite dimensional vector spaces*. (2nd Ed.). S.l.: Literary Licensing, LLC
3. S. Kumaresam, S. (2000). *Linear algebra:* A geometrical approach, New Delhi: PHI Learning.
4. Hoffman, K. & Kunze, R. A. (2010). *Linear algebra*. New Delhi: PHI Learning.

Suggested E-learning Material:
1. Video Lectures: https://www.edx.org/learn/linear-algebra
2. Video Lectures: https://ocw.mit.edu/courses/mathematics/18-06-linear-algebra-spring-2010/
3. Video Lectures: https://onlinecourses.nptel.ac.in/noc17_ma04/preview

MATH 301 Complex Analysis

Max. Marks: 100   **L T P C**
(CA: 40+ESA: 60)   **4 0 0 4**

Learning Outcomes: After completion of this course, the students will be able to:

- Demonstrate understanding of the basic concepts and fundamental definitions underlying complex analysis.
- Investigate complex functions, concept of limit, continuity and differentiability of complex functions.
- Demonstrate capacity for mathematical reasoning through analyzing analytic functions.

- Prove and explain concepts of series and integration of complex functions.
- Understand problem-solving using complex analysis techniques.
- Enjoy the roll of complex functions in analysis and applied contexts.

Unit 1 Complex Numbers, concept of limit, continuity and differentiability, Analytic Functions, Necessary and sufficient condition for a function to be analytic, Polar form of Cauchy-Riemann equations, Construction of an analytic functions.

Unit 2 Conformal Transformation and representation, Bilinear Transformation, Transformations $w = z^2, w = \sqrt{z}, w = e^z$ and $w = \log z$.

Unit 3 Complex Integration - Definition, Cauchy's theorem, Cauchy's Goursat's Lemma, Cauchy's theorem, Cauchy's integral formula and its generalized form, Morera's theorem, Liouville's theorem, Taylor's and Laurent's expansion

Unit 4 Singularities: Zeros of an analytic function, Singular points, Different type of singularities, Residue at a pole, Residue at infinity, Cauchy's residue theorem, Computation of residue at a (i) simple pole, (ii) multiple pole.

Unit 5 Integration round the unit circle, Integration of f(z) when it has no pole on the real line, Integration of f(z) when it has poles on real line.

Suggested Reference Books:

1. Lang, S. (1999). *Complex Analysis*. New York : Springer.
2. Ahlfors, L. (1988). *Complex Analysis.* Auckland: McGraw-Hill.
3. Churchill, R.V. & Brown, J.W. (1995). *Complex Variables and Applications* (6th ed.). New York: McGraw-Hill.

Suggested E-learning material

1. Complex Analysis; NPTL https://nptel.ac.in/courses/111103070/

Fifth Semester

Core Paper

MATH 302 Introduction to Discrete Mathematics

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After completion of this course, the students will be able to:

- Write an argument using logical notation and determine the validity of an argument.
- Demonstrate the ability to write and evaluate a proof or outline the basic discrete structure.
- Understand the basic principles of sets and operations on sets.
- Apply counting techniques to solve the problems.
- Demonstrate an understanding of relations and functions and their properties.
- Demonstrate an understanding of core ideas and basic concepts of graph theory.
- Model the problems and solve them using graph algorithms.
- Understand the numeric functions, generating functions and linear reoccurrence relation.
- Understand the basic principle of lattice and Boolean algebra.

Unit 1   Sets and Multisets, Relations and Functions, Equivalence relations, Partial order relations, Chains and Antichains. Permutations, Combinations, selection with & without replacement, Permutation and Combinations of multisets. Discrete probability. The rules of sum and product.

Unit 2   Basic concepts of graph theory, Multi-graphs, Paths & Circuits, Eulerian path and circuits, Hamiltonian path and circuits, weighted graphs, Shortest path in weighted graph, Planar graphs, Vertex connectivity and edge connectivity of graphs.

Unit 3   Vertex coloring and edge coloring of graphs, Vizing's theorem, Trees and cut sets- Trees, Rooted tree, Path lengths in rooted trees, Spanning tree and cut set, Minimum spanning tree, Matrix representation of graphs.

Unit 4   Pigeon hole principle, Inclusion-exclusion principle. Discrete numeric functions-manipulation of numeric functions. Asymptotic

behavior of numeric functions. Generating functions and recurrence relations. Linear recurrence relation with constant coefficients and their solutions.

Unit 5   Mathematical logic: Basic Connectives, normal forms (CNF and DNF), proof of Validity, Predicate logic, Lattices and Boolean algebra. Uniqueness of finite Boolean algebra. Boolean functions and Boolean expressions. Propositional Calculus.

Text Books:

1. Rosen, K.H. (1999). Discrete Mathematics and it's Applications. McGraw Hil.

2. Liu, C.L. & Mohapatra, D.P. (2008). Elements of   Discrete Mathematics, Tata   McGraw Hill.

3. Deo, N. (2004). Graph Theory. Prentice Hall of India, New Delhi.

Reference Books:

1. Biggs, N.L. (1985). Discrete Mathematics. Oxford Science Publication.

2. Koshy, T. (2005). Discrete Mathematics with Applications. Academic Press.

Suggested E-learning material:

1.   https://www.geeksforgeeks.org/engineering-mathematics-tutorials/

2.   http://mathworld.wolfram.com/DiscreteMathematics.html

Sixth Semester

Core Paper

MATH 303 Introduction to Numerical Analysis

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

*   Apply numerical methods to obtain approximate solutions to mathematical problems.

*   Solve the nonlinear equations, system of linear equations and interpolation problems using numerical methods.

*   Examine the appropriate numerical differentiation and integration methods to solve problems.

- Apply the numerical methods to solve differential equations.

Unit 1 **Error analysis:** Exact and approximate numbers, rounding of numbers, Significant digits, various types of errors encountered in computations, error in function approximation, the general error formula, Taylor's series, error in series approximation. **Numerical solution of system of linear equations:** Direct methods: The matrix inversion method, Gauss elimination method with pivoting strategies, Gauss–Jordan method, Factorization methods (LU-Doolittle, Crout, LDL^T, Cholesky), computing inverse of a matrix. Iterative methods: Gauss-Jacobi Method, Gauss-Siedel method.

Unit 2 **Finite differences:** forward, backward, central and divided difference operators, their properties and difference tables, propagation of error in difference table, missing data calculation, Relation between difference and derivatives, differences of polynomials. **Polynomial interpolation:** Newton-Gregory forward and backward interpolation, Gauss's forward and backward, Stirling's, Bessel's interpolation, Lagrange's and Newton's divided differences interpolation, inverse interpolation, computation errors in these formulae and analysis of errors.

Unit 3 **Numerical differentiation, Numerical integration**: Newton's Cotes Quadrature formula, Simpson's, Weddle's and Trapezoidal rules, Gauss Quadrature formula.

Unit 4 **Root finding for nonlinear equations** (Transcendental and Algebraic equations), Iterative method, Bisection method, Regula-Falsi method, Newton Raphson's method, order of convergence.

Unit 5 **Numerical solution of first and second order differential equations**: Euler's Method, Picard's Method, Taylor's series approximation, Runge-Kutta's Method.

Text Books:

1. Sastry, S.S. (2012). *Introductory methods of numerical analysis*. New Delhi, ND**:** PHI Learning Private Limited.
2. Chauhan, D. S., Vyas, P. & Soni, V. (2005). Studies in numerical analysis. Jaipur, Jaipur Publishing House.

Reference Books:

1. Jain, M. K., Iyengar, S. R. K. & Jain, R. K. (2007). Numerical methods for scientific and engineering computations. New Delhi, ND: New Age International.

2. Rajaraman, V. (1984). Computer oriented numerical methods. New Delhi, ND: Prentice Hall of India.

3. Phillips, G.M. & Taylor, P.J. (1996). Theory and applications of numerical analysis. Academic Press, Elsevier.

4. Burden, R.L., Faires, D.J. & Burden, A.M. (2016). Numerical Analysis. Cengage learning.

Suggested E-learning material:

1. Elementary Numerical Analysis; Platform: Nptelhttps://nptel.ac.in/courses/111101003/

2. Numerical Differentiation and Numerical Integration; Platform: MIT open courseware https://ocw.mit.edu/courses/mechanical-engineering/2-993j-introduction-to-numerical-analysis-for-engineering-13-002j-spring-2005/lecture-notes/lect_9.pdf

3. Computational Error; Platform: Nptelhttps://nptel.ac.in/courses/111107062/

Discipline Electives

MATH 203 Introduction to Mechanics

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Explain the geometry of the motion of particle in plane curve, i.e. position, velocity, and acceleration, and how those quantities are related through calculus.

- Learn Newton's laws of motion and examines their application to a wide variety of problems.

- Learn the basic concept of composition and resolution of forces and friction.

- Understand and visualize the real physical problem in terms of Mathematics.

- Learn one-dimensional (SHM), multi-dimensional (Projectile motion), and constrained motion, motion of particle with or without connecting with string.

Unit 1 Motion in a Plane Curve: Velocity and acceleration (radial, transverse, tangential and normal), Motion of two particles connected by a string.

Unit 2 Projectile on a horizontal plane, Simple harmonic motion.

Unit 3 Constrained motion: Motion along a smooth vertical circle and smooth cycloid, Hooke's law, Motion of a particle attached to an elastic string.

Unit 4 Composition and resolution of forces, Equilibrium of forces acting at a point (Lami's theorem only), Parallel forces, Moments.

Unit 5 Friction-definition, Statical friction, Dynamical friction, Limiting equilibrium-an inclined plane, Common catenary.

Text Books:

1. Ray, M. & Sharma, G. C. (2006). *A Text Book on Dynamics* (13th revised ed.). New Delhi, S. Chand and Company.

2. Gokhroo, D. C. & Bhargava, S. L. (2009). *Elementary Mechanics*, Jaipur: Jaipur Publishing House (JPH).

3. Gokhroo, D. C., Saini, S. R. & Arora, R. K. (2017). *Elements of Dynamics*, Jaipur: Jaipur Publishing House (JPH).

Reference Books:

1. Ramsay, A. S. (2004). *Statics* (2nd ed.). CBS Publishers and Distributors.

2. Ramsay, A. S. (2002). *Dynamics* (2nd ed.). CBS Publishers and Distributors.

3. Gaur, Y. N., Mathur, A. K., Goyal, M. C. & Manohar, P. (2018-19). *Dynamics*, Jaipur & New Delhi: Ramesh Book Depot Publishing House.

4. Goyal, M. C., Sharma, O. P. & Goyal, M. (2018-19). *Statics*, Jaipur & New Delhi: Ramesh Book Depot Publishing House.

5. Sharma, K.C., Gokhroo, D. C. & Saini, S. R. (1996). *Elements of Statics.* Jaipur: Jaipur Publishing House (JPH).

Suggested E-learning material:

1. Engineering Mechanics: Statics & Dynamics; Platform: cosmolearning,

https://cosmolearning.org/courses/engineering-mechanics-statics-dynamics/

2. Engineering Mechanics: Statics & Dynamics; Platform: nptel

    https://nptel.ac.in/courses/112106180/

3. Engineering Dynamics; Platform: MIT Open courseware,

    https://ocw.mit.edu/courses/mechanical-engineering/2-003sc-engineering-dynamics-fall-2011/

MATH 304 Linear Programing and Its Applications

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Formulate the LPP.
- Conceptualize the feasible region.
- Solve the LPP with two variables using graphical method.
- Solve the LPP using simplex method.
- Formulate the dual problem from primal.
- Solve Transportation and Assignment problems
- Solve the problems of competitive situations between two competitors.

Unit 1 Linear Programming Problem: Definition, Formulation of LPP, Graphical Method

Unit 2 Simplex Method, Big-M and Two-Phase Method, Degeneracy, Resolution of degeneracy. Limitation of LPP.

Unit 3 Duality in LPP, Important results in Duality, Dual Simplex Method.

Integer Programming: Definition, Gomory's Method.

Unit 4 Transportation: Definition, Solution by Simplex Method.

Assignment: Definition, Solution by Simplex Method.

Unit 5 Game Theory: Definition, 2 person zero-sum Game, Game with mixed strategies Solution by using Simplex Method.

Text Books :

1. Kambo, N. S. (1991). *Mathematical programming techniques*. New Delhi: East-West Press.

2. Chatterjee, D. (2005). *Linear programming and game theory*. New Delhi: Prentice-Hall of India Private Ltd.

Reference Book:

1. Swarup, K., Gupta, P. K. & Mohan, M. (1977). *Operations Research (Answers to problems)*. New Delhi: Sultan Chand & Sons.

2. Pant, J. C. (2004). *Introduction to optimization: Operations Research*. New Delhi: Jain Brothers.

3. Taha, H. A. & Pearson Education. (2017). *Operations research: An introduction*. Harlow [i 21 pozostałych: Pearson.

4. Hillier, F. S. & Lieberman, G. J. (1972). *Introduction to operation research*. San Francisco: Holden-Day.

Suggested E-learning material

1. Linear Programming, a CPLEX tutorial
   https://ibmdecisionoptimization.github.io/tutorials/html/Linear_Programming.html

2. Linear Programming Tutorial | Sophia Learning
   https://www.sophia.org/tutorials/linear-programming--5

3. Lectures – nptel: https://nptel.ac.in/courses/111102012/

MATH 312 Vector Calculus

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: On completion of this course, students will be able to,

- Manipulate vectors to perform geometrical calculations in three dimensions.

- Use Green's theorem and the Divergence theorem to compute integrals. Explain how Green's Theorem is a generalization of the Fundamental Theorem of Calculus.

- Communicate Calculus and other mathematical ideas effectively in speech and in writing.

- Recognize when it is appropriate to use a scalar and when to use a vector in problem solving.

Unit 1 Definition and examples of vector and scalar; Basic operations: addition, substraction, multiplication and scalar product of vectors, geometric representation of vectors, magnitude and direction, dot product and cross product.

Unit 2 Scalar and vector product of three vectors, product of four vectors, vector-valued function; Scalar-valued function, limit, Continuity, differentiability and Integration of vector-valued functions of one variable.

Unit 3 Partial derivatives: chain rule, exact differentials, Del Applied to scalar valued Function (gradient), Del applied to vector point function (Divergence, Curl), Physical interpretation of divergence, Physical interpretation of curl, Irrotational and Solenoidal vector-valued function.

Unit 4 Directional derivative, tangent planes and normals lines, Tangential line integral, Circulation, Work, Independence of path, Conservative fields, Normal Surface integral, Flux across a surface.

Unit 5 Vector fields, characterization of Irrotational and Solenoidal vector fields, Green's theorem in a plane, Gauss divergence theorem and Stoke's theorem, Simple applications.

Text / Reference Books

1. Thomas, G.B., Weir, M.D. & Hass, J. (2011). *Thomas' Calculus,* (11th ed.). Pearson Education.

2. Grewal, B.S. & Grewal, J.S. (2005). *Higher Engineering Mathematics (* 37th ed.). New Delhi: Khanna Publishers.

3. Davis, H. F. & Snider, A. D. (1998). *Introduction to Vector Analysis (* 7th ed.). William C. Brown Pub.

4. Matthews, P. C. (1998). *Vector Calculus.* Springer-Verlag.

Suggested E-learning material

https://www.brightstorm.com/tag/scalar/

MATH 310 Number Theory

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the concept of divisibility and able to find greatest common divisor of large integers using Euclidean algorithm.

- Appreciate the importance of prime numbers and their distribution.

- Solve linear congruences and system of linear congruences.

- Know Euler's theorem, Fermat's theorem and Wilson's theorem.
- Demonstrate the applications of number theory in cryptography.

Unit 1 Integers, well-ordering principle, induction, Fibonacci numbers, divisibility, Greatest Common Divisor, least common multiple, Euclidean algorithm, prime numbers, distribution of primes, fundamental theorem of arithmetic.

Unit 2 Congruences, linear congruences, Chinese remainder theorem, congurences with prime power modulai. linear Diophantine equations.

Unit 3 Arithmetic fuction, Euler's Theorem, Fermat's little theorem, Wilson's theorem, primality testing and pseudoprimes and Carmichael numbers.

Unit 4 Group of units, Euler's fuction, primitive root, the group U_p^e and U_2^e. Mobius inversion formula, Quadratic residues, Legendre symbol, Gauss's lemma, quadratic reciprocity,

Unit 5 Perfect numbers, Fermat and Mersenne prime. Applications of number theory in cryptography.

Text Books:

1. Burton, D. M. (2012). *Elementary number theory*. McGraw-Hill Education (India).

Reference Books:

1. Niven, I., Zuckerman, H. S. & Montgomery, H. L. (2013). *An introduction to the theory of numbers*. New York: Wiley.

2. Rosen, K. H. (2005). *Elementary number theory and its applications*. Boston: Pearson/Addison Wesley.

Suggested E-learning Material:

1. Lecture Notes: NPTEL: https://nptel.ac.in/courses/111103020/

2. Lecture Notes: MIT OPEN COURSE WARE:
   https://ocw.mit.edu/courses/mathematics/18-781-theory-of-numbers-spring-2012/index.htm

MATH 313 Multivariable Calculus

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Locate points in R^3 given in rectangular, cylindrical and spherical coordinates.
- Recognize and find equations of cylindrical surfaces, quadric surfaces and surfaces.
- Use the method of Lagrange multipliers to solve constrained optimization problems.
- Evaluate triple integrals and use them to find volumes in rectangular, cylindrical and spherical coordinates.
- Use a Jacobin to make a change of variables in a double integral.
- Use Green's theorem to evaluate line integrals.
- Solve applied optimization problems involving functions of two or three variables.

Unit 1 Three-Dimensional coordinate system, Vectors, The dot product, The Cross product, Equations of lines and Planes, Cylinders and Quadric surfaces, Cylindrical and Spherical coordinates, Vector function and Space curves, Derivatives and Integrals of vector functions , Arc length and Curvature.

Unit 2 Function of several variables, Level curves, Limits and Continuity, Partial derivatives, Tangent planes and linear approximation, The Chain rule, Directional derivatives and gradient vector.

Unit 3 Maximum and minimum, Lagrange multipliers, Double Integrals over rectangles, Double Integral over general regions, Double Integral in polar coordinates, Surface area.

Unit 4 Triple integral, Triple Integral in cylindrical and spherical coordinates, Change of variable in multiple integral, Vector fields, line integrals, The Fundamental theorem for line integrals.

Unit 5 Green's Theorem, Curl and Divergence, Parametric surfaces and their Areas, Surface Integrals, Stokes Theorem.

Text Books:
1. Stewart, J. (2007). *Calculus: Early transcendentals*. Belmont, CA: Thomson Higher Education.

Reference Books:
1. Hass, J., & Weir, M. D. (2008). *Thomas' calculus: Early transcendentals*. Boston: Pearson Addison-Wesley.

दर्शन शास्त्र
प्रथम समसत्र

PHIL 101 भारतीय दर्शन – I

Max. Marks : 100　　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　　　**4　0　0　4**

प्रथम　1. दर्शन का अर्थ एवं भारतीय दर्शन की विशेषतायें तथा औपनिषदिक दर्शन

　　　2. चार्वाक दर्शन – प्रमाण विचार, तत्त्व विचार एवं नैतिक विचार

　　　3. दर्शन की देन

द्वितीय　जैन दर्शन –

　　　(क) अनेकान्तवाद स्यादवाद

　　　(ख) तत्त्व विचार–द्रव्य के भेद, षड् द्रव्य, सात तत्त्व

　　　(ग) बंधन एवं मोक्ष

　　　(घ) दर्शन की महत्ता

तृतीय　बौद्ध दर्शन –

　　　(क) चार आर्य सत्य

　　　(ख) प्रतीत्यसमुत्पादवाद

　　　(ग) क्षणिकवाद

　　　(घ) अनात्मवाद एवं चार बौद्ध सम्प्रदाय

　　　　　(1) शून्यवाद　　(2) विज्ञानवाद　(3) बाह्यानुमेयवाद　एवं (4) बाह्यप्रत्यक्षवाद

　　　(ङ) बौद्ध दर्शन की महत्ता

चतुर्थ　न्याय दर्शन –

　　　(i) ज्ञान मीमांसा

　　　　　(क) प्रमाण विचार–प्रत्यक्ष, अनुमान, व्याप्ति एवं हेत्वाभास

　　　　　(ख) उपमान एवं　(ग) शब्द

　　　(ii) तत्त्व मीमांसा –

　　　　　(क) जगत् विचार (ख) जीवात्मा और मोक्ष (ग) ईश्वर विचार

पंचम　वैशेषिक दर्शन – सप्त पदार्थ विवेचन

　　　(1) द्रव्य (2) गुण (3) कर्म (4) सामान्य (5) विशेष (6) समवाय एवं　(7) अभाव।

PHIL 103 विश्व के धर्म – I

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

प्रथम   1. धर्म की परिभाषा – वेद, उपनिषद्, गीता, स्मृति एवं दर्शन के अनुसार

2. धर्म का स्वरूप – सैद्धान्तिक, संवेगात्मक एवं व्यावहारिक पक्ष

3. धर्म का उद्भव एवं विकास

द्वितीय   हिन्दू धर्म : प्राचीन एवं सनातन

1. प्रमुख सिद्धांत – चार पुरुषार्थ, कर्म, पुनर्जन्म, चार आश्रम, स्थितप्रज्ञता आदि।

2. धार्मिक आन्दोलन, भक्ति आन्दोलन, ब्रह्म समाज, आर्य समाज

3. उपासना विधि–ज्ञान योग, कर्म योग, भक्ति योग।

तृतीय   यहूदी धर्म – प्रवर्तक परिचय : दस आदेश, ईश्वर का स्वरूप, उपासना विधि, ओल्ड टेस्टामेंट का परिचय।

चतुर्थ   इसाई धर्म – प्रवर्तक परिचय : पर्वतीय उपदेश, ईश्वर का स्वरूप, सम्प्रदाय–प्रोटेस्टेण्ट एवं कैथोलिक विधि, बाइबिल का परिचय।

पंचम   पारसी धर्म – प्रवर्तक परिचय : प्रमुख सिद्धांत, ईश्वर का स्वरूप, उपासना विधि, जेन्दावस्ता का परिचय।

द्वितीय समसत्र

PHIL 102 भारतीय दर्शन – II

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

इकाई   संस्तत पाठ्यक्रम

प्रथम   सांख्य दर्शन – (क) सत्कार्यवाद का सिद्धान्त

(ख) प्रकृति (ग) पुरुष (घ) सृष्टि का विकास

(ङ) बंधन एवं मोक्ष एवं सांख्य दर्शन की महत्ता

द्वितीय   योग दर्शन – (क) योग का स्वरूप

(ख) अष्टांग योग साधन (ग) ईश्वर विचार

(घ) योग का प्रयोजन

तृतीय   मीमांसा दर्शन – (क) प्रमाण विचार – उपमान, शब्द, अर्थापति एवं अनुपलब्धि प्रमाण

(ख) प्रामाण्य विचार – स्वतः प्रामाण्यवाद एवं परतः प्रामाण्यवाद

(ग) अख्यातिवाद एवं विपरीत ख्यातिवाद

चतुर्थ   वेदान्त दर्शन –

(क) अद्वैतवेदान्त (शंकराचार्य)

(ख) विशिष्टाद्वैतवेदान्त (रामानुजाचार्य)

(ग) शंकर एवं रामानुज के विचारों का तुलनात्मक विवेचन

पंचम   वेदान्त दर्शन –

(क) द्वैताद्वैतवेदान्त (श्री निम्बार्कार्चाय)

(ख) द्वैतवेदान्त (मध्वाचार्य)

संदर्भ पुस्तकें :–

1. सतीशचन्द्र चट्टोपाध्याय एवं धीरेन्द्रमोहन दत्त : भारतीय दर्शन–परिचय

2. एम. हिरियन्ना : भारतीय दर्शन की रूपरेखा

3. पारसनाथ द्विवेदी : भारतीय दर्शन

4. डॉ. चन्द्रधर शर्मा : ए क्रिटिकल सर्वे ऑफ इण्डियन फिलासॅफी

5. डॉ. बलदेव उपाध्याय : भारतीय दर्शन

6. डॉ. रामनाथ शर्मा : भारतीय दर्शन के मूल तत्त्व

7. डॉ. राधाकृष्णन् : भारतीय दर्शन

PHIL 104 विश्व के धर्म – II

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

प्रथम   इस्लाम धर्म – प्रवर्तक परिचय : प्रमुख सिद्धांत, ईश्वर का स्वरूप, उपासना विधि, कुरान का परिचय।

द्वितीय   जैन एवं बौध धर्म

(क) तीर्थंकरों का परिचय, अहिंसा आदि पंच महाव्रतों का स्वरूप। सम्प्रदाय– दिगम्बर, श्वेताम्बर, उपासना विधि, प्रमुख ग्रंथ परिचय।

(ख) बौद्ध धर्म के चार आर्य सत्य सम्प्रदाय–हीनयान, महायान प्रमुख ग्रंथ परिचय।

तृतीय	सिक्ख धर्म – प्रवर्तक गुरुओं का परिचय

प्रमुख सिद्धांत, ईश्वर का स्वरूप, उपासना विधि, गुरु ग्रंथ साहिब का परिचय।

सूफी धर्म – कबीर साहिब की मानववादी दृष्टि, कबीर साहिब की समन्वय दृष्टि

चतुर्थ (1) चीन का ताओमत

(2) जापान का शिण्टोमत।

पंचम (1) विभिन्न धर्मों में नैतिक तत्त्व एवं आध्यात्मिक दृष्टिकोण का तुलनात्मक विवेचन

(2) सर्वधर्म समभाव एवं धार्मिक सहिष्णुता

संदर्भ पुस्तकें :–

1. हरेन्द्र प्रसाद सिन्हा : धर्म–दर्शन की रूपरेखा
2. बिहारीलाल सावंलिया : विश्व के धर्म
3. Jaico Publication : World Religions.
4. डॉ. कर्णसिंह : हिन्दू धर्म : नई चुनौतियाँ
5. डॉ. उर्मिला चतुर्वेदी : भारतीय चिन्तन की दिशायें
6. वेदप्रकाश वर्मा : धर्म दर्शन की मूल समस्यायें

तृतीय समसत्र

PHIL 201 नीतिशास्त्र – I

Max. Marks : 100　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　**4　0　0　4**

इकाई

प्रथम नीतिशास्त्र का स्वरूप और क्षेत्र

(1) नीतिशास्त्र की परिभाषा

(2) नीतिशास्त्र की विधायें

(3) नीतिशास्त्र की उपयोगिता और अन्य शास्त्रों से सम्बन्ध

द्वितीय नैतिक निर्णय का स्वरूप एवं प्रमाणीकरण

(1) प्रकृतिवाद

(2) व्यक्तिनिष्ठवाद

(3) वस्तुनिष्ठवाद

तृतीय स्वार्थवाद और सुखवाद

(1) स्वार्थवाद का स्वरूप (नैतिक एवं मनोवैज्ञानिक)

(2) सुखवाद का स्वरूप (नैतिक एवं मनोवैज्ञानिक)

(3) सुखवाद : बैथम और मिल का सुखवादी सिद्धान्त

चतुर्थ अन्तः प्रज्ञावाद – अन्तः प्रज्ञावाद का स्वरूप

(1) बौद्धिक अन्तःप्रज्ञावाद (कडवर्थ एवं क्लार्क)

(2) नैतिक संविति का सिद्धान्त (शैफ्टसबरी एवं हचिसन)

(3) अन्तः विवेक का सिद्धान्त (बटलर)

पंचम आत्मपूर्णतावाद –

(1) सामान्य परिचय

(2) हेगल –वैयक्तिक एवं सामाजिक हित का एकीकरण

(3) ब्रेडले – कर्ता की स्थिति और उसका दायित्व

PHIL 203 पाश्चात्य दर्शन – I

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		4	0	0	4

इकाई संस्तुत पाठ्यक्रम

प्रथम सोफिस्ट एवं सुकरात

1. सोफिस्ट दर्शन का सामान्य ज्ञान

2. प्रोटोगोरस एवं गार्जियस के दार्शनिक विचार

3. सुकरात की दार्शनिक समस्या एवं पद्धति

4. सुकरात का नीति विज्ञान, सद्गुण एवं ज्ञान का संबंध।

द्वितीय प्लेटो –

1. ज्ञान मीमांसा, द्वन्द्वात्मक पद्धति एवं ज्ञान के विभिन्न स्तर।

2. प्रत्ययवाद की विशेषताएँ एवं उनकी सिद्धि के लिये प्रमाण।

3. इन्द्रिय जगत् एवं प्रत्ययों में सम्बन्ध।

4. आत्मा का स्वरूप एवं उसकी अमरता का सिद्धान्त।

तृतीय अरस्तु –

1. तत्व विज्ञान

2. प्लेटो के प्रत्ययवाद की आलोचना

3. कारणता का सिद्धान्त

4. ईश्वर सम्बन्धी विचार

चतुर्थ देकार्ते –

1. देकार्ते के अनुसार आत्मा

2. ईश्वर की धारणा एवं उसके अस्तित्व के लिये प्रमाण

3. बाह्य जगत के अस्तित्व की सिद्धि

4. शरीर और मन का सम्बन्ध

पंचम स्पिनोजा –

1. सर्वेश्वरवाद एवं शून्यवाद

2. शरीर और मन का सम्बन्ध

लाइबनित्स –

1. दार्शनिक समस्या

2. मोनेडवाद (चिद् बिन्दुवाद)

3. पूर्वस्थापित सामंजस्य

4. ईश्वर सम्बन्धी विचार

चतुर्थ समसत्र
PHIL 202 नीतिशास्त्र – II

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

इकाई संस्तुत पाठ्यक्रम

प्रथम संकल्प–स्वातंत्र्य एवं नैतिक उत्तरदायित्व

(1) सामान्य परिचय

(2) संकल्प की स्वतंत्रता का अर्थ

(3) नियतत्त्ववाद और अनियतत्त्ववाद

(4) नैतिक उत्तरदायित्व

द्वितीय काण्ट का निरपेक्ष आदेश का सिद्धान्त

सामान्य परिचय

(1) शुभ संकल्प एवं कर्त्तव्य का स्वरूप व महत्व

(2) सापेक्ष और निरपेक्ष आदेश में भेद

(3) मुख्य नैतिक नियम

(4) नैतिकता की आवश्यक मान्यताएँ –

(5) काण्ट के सिद्धान्त का मूल्यांकन

तृतीय व्यक्ति और समाज –

(1) व्यक्ति एवं समाज का स्वरूप एवं सम्बन्ध

(2) अधिकार व कर्तव्य

(3) दण्ड के सिद्धान्त

चतुर्थ यूनानी नैतिक दर्शन

(1) सुकरात के नैतिक विचार

(2) सैरेनिक्स और सिनिक्स के नैतिक विचार

(3) प्लेटो के नैतिक विचार

(4) अरस्तु के नैतिक विचार

पंचम भारतीय नैतिक दर्शन –

(1) गीता का निष्काम कर्मयोग

(2) स्थित–प्रज्ञ का स्वरूप

(3) देवी एवं आसुरी सम्पदा

(4) अणुव्रत का नैतिक सिद्धान्त

(5) बौद्धाचार का सिद्धान्त

संदर्भ पुस्तकें :–

1. वेदप्रकाश शर्मा : नीतिशास्त्र के मूल सिद्धान्त

2. जे. एफ. सिन्हा : नीतिशास्त्र

3. डॉ. रामनाथ शर्मा : नीतिशास्त्र की रूपरेखा

4. डॉ. लक्ष्मी सक्सेना : नीतिशास्त्र के मूल सिद्धान्त

5. डॉ. हृदयनारायण मिश्र एवं डॉ. ज. प्र. अवस्थी : नीतिशास्त्र की भूमिका

PHIL 204 पाश्चात्य दर्शन – II

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

इकाई संस्तुत पाठ्यक्रम

प्रथम लॉक –

1. लॉक की समस्या

2. सहजात प्रत्ययों का खण्डन

3. प्रत्ययों का उद्भव और रचना

4. जड़ की अवधारणा

5. ज्ञान की असंदिग्धता, वास्तविकता एवं ज्ञान की सीमा का निर्धारण।

द्वितीय बर्कले –

1. भौतिक जगत् का खण्डन

2. विज्ञानवाद की स्थापना

3. विषयवाद एवं विषयीवाद का स्वरूप विवेचन

तृतीय ह्यूम –

1. ज्ञान का उद्गम एवं स्वभाव की विवेचना

2. द्रव्यविचार–आत्मद्रव्य का खण्डन

3. कार्यकारण सम्बन्ध की समीक्षा

4. बाह्य जगत् सम्बन्धी विचार

5. ह्यूम का सन्देहवाद

चतुर्थ बुद्धिवाद एवं अनुभववाद –

1. बुद्धिवादी दार्शनिकों की पद्धति एवं तत्व संबंधी विचार

2. अनुभववादियों की पद्धति एवं तत्व संबंधी विचार

3. बुद्धिवाद एवं अनुभववाद की समीक्षा

पंचम काण्ट –

1. काण्ट की समस्या (ज्ञान की समस्या)

2. संवेदन शक्ति के प्रागनुभाविक रूपों (देश और काल) की विवेचना।

3. प्रागनुभाविक वैश्लेषिकी – समझ के प्रत्ययों एवं उनसे निर्मित निर्णयों के स्वरूप का विवेचन

4. प्रागनुभाविक द्वन्द्वशास्त्र – प्रज्ञा के तीन प्रत्ययों – आत्मा, ईश्वर एवं विश्व संबंधी विरोधी विचारों की व्याख्या

5. काण्ट का अज्ञेयवाद

6. क्या काण्ट ने ह्यूम की समस्या का समाधान किया ? मूल्यांकन

संदर्भ पुस्तकें –

1. जे. एस. श्रीवास्तव : ग्रीक एवं मध्ययुगीन दर्शन का इतिहास

2. स्टेस : ग्रीक फिलोसफी

3. डॉ. ज. प्र. अवस्थी : पाश्चात्य दर्शन का इतिहास

4. प्रो. दया कृष्ण : पाश्चात्य दर्शन का इतिहास
5. फ्रैंक थिली : वेस्टर्न फिलॉसफी
6. याकूब मसीहा : आधुनिक पाश्चात्य दर्शन

पंचम समसत्र

PHIL 301 समकालीन भारतीय दर्शन – I

Max. Marks : 60   **L T P C**
(CA: 20 + ESA: 40)   **4 0 0 4**

नोट :– यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 8 अंक निर्धारित हैं। प्रत्येक अन्विति में से उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

इकाई

प्रथम   1. प्रथमसमकालीन भारतीय दर्शन का स्वरूप समकालीन भारतीय चिन्तन की विशेषतायें

       2. समकालीन दर्शन की जीवन के लिए प्रेरणा

       (1) रामकृष्ण परमहंस – जीव (1) ब्रह्म एवं माया सम्बन्धी विचार (2) सर्वधर्म समन्वय : प्रेममार्ग (3) मूल्यांकन

द्वितीय   (2) स्वामी विवेकानंद – (1) व्यावहारिक वेदान्त (2) वेदान्त व्याख्या : तत्वदर्शन (3) विवेकानंद का धर्म–विचार, सार्वभौम धर्म (4) योग के चार प्रकार – ज्ञानयोग का स्वरूप (5) मूल्यांकन

तृतीय   (3) महात्मा गांधी – (1) व्यावहारिक आदर्शवादी (2) ईश्वर विचार – सत्य ही ईश्वर है। सत्य और अहिंसा (3) आत्मा की धारणा, धर्म और नैतिकता, सत्याग्रह सर्वोदय (4) समकालीन समाज में गांधी के विचारों की प्रासंगिकता

चतुर्थ   (4) रविन्द्रनाथ टैगोर–कवि दृष्टि, प्रेमी भक्त (1) ईश्वर, आत्मा एवं जगत् सम्बन्धी विचार (2) अशुभ की समस्या, मानव धर्म (3) बंधन एवं मुक्ति   (4) मूल्यांकन

पंचम   (5) सर्वपल्ली राधाकृष्णन्–(1) धर्म और विज्ञान (2) तत्व दर्शन (3) ज्ञानमीमांसा (4) अन्तः अनुभूति (5) विवेक एवं अनुभूति की विज्ञान, कला, नीतिशास्त्र एवं धर्म के क्षेत्र में भूमिका (6) ईश्वर विचार एवं मूल्यांकन

पाठ्य पुस्तकों के नाम –

(1) समकालीन भारतीय–दर्शन : डॉ0 श्रीमती लक्ष्मी सक्सेना

(2) भारतीय चिन्तन की दिशायें : डॉ0 उर्मिला चतुर्वेदी

(3) समकालीन भारतीय चिन्तक : रमेश चन्द्र सिन्हा, विजयश्री

(4) समसामयिक भारतीय दार्शनिक : शान्ति जोशी

PHIL 302 सांख्य–योग – I

Max. Marks : 60 **L T P C**
(CA: 20 + ESA: 40) **4 0 0 4**

नोट :– यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 8 अंक निर्धारित हैं। प्रत्येक अन्विति में से उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

इकाई

प्रथम
1. सांख्य की समस्या–त्रिविध दुःख एवं उनकी निवृत्ति के उपाय
2. प्रमाण विचार–प्रत्यक्ष, अनुमान एवं शब्द
3. सत्कार्यवाद का सिद्धान्त

द्वितीय
1. सत्व, रजस् एवं तमस् – इन तीनों गुणों का स्वरूप एवं कार्य
2. प्रकृति का स्वरूप एवं उसकी अस्तित्व सिद्धि के प्रमाण
3. प्रकृति एवं पुरुष के संयोग की विवेचना

तृतीय
1. सृष्टि का विकास क्रम– व्यक्त एवं अव्यक्त प्रकृति का स्वरूप
2. भौतिक सर्ग – बुद्धि, अहंकार मन आदि के लक्षण एवं उनके साधारण व असाधारण व्यापार
3. बौद्धिक सर्ग – बुद्धि के भेदों की सृष्टि एवं सूक्ष्म शरीर का स्वरूप निरूपण

चतुर्थ
1. पुरुष का स्वरूप एवं उसके अस्तित्व की सिद्धि के लिए प्रमाण।
2. पुरुष–बहुत्व की सिद्धि।

पंचम
1. बन्धन एवं मोक्ष का स्वरूप
2. क्या पुरुष वास्तव में बंधता है ?
3. जीवन मुक्ति, विदेह मुक्ति, मुक्ति का साधन एवं मुक्त पुरुष की स्थिति
4. सांख्य दर्शन की जीवन में उपादेयता ।

षष्ठम समसत्र

PHIL 303 सांख्य–योग – II

Max. Marks : 60   **L T P C**

(CA: 20 + ESA: 40)   **4 0 0 4**

यह प्रश्न पत्र पाँच अन्वितियों में विभक्त है प्रत्येक अन्विति के लिए 8 अंक निर्धारित है। प्रत्येक अन्विति से उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

इकाई

प्रथम   योग का अर्थ एवं योग के प्रकार –

(1) शारीरिक

(2) आध्यात्मिक – ज्ञानयोग, भक्तियोग, कर्मयोग प्रेमयोग, महर्षि पतंजलि का योग

(3) चित्त तथा चित्तवृत्ति का स्वरूप

द्वितीय (1) चित्तवृत्ति निरोध का उपाय कथन :

(1) अभ्यास एवं (2) वैराग्य

(2) समाधि का स्वरूप एवं प्रकार –

(1) संप्रज्ञात एवं (2) असंप्रज्ञात–लक्षण एवं भेद

तृतीय   (1) योग में ईश्वर का स्वरूप

(2) योग में चित्तविक्षेपों का स्वरूप, कारण व निवारण

(3) ईश्वर प्राणिधान, एवं उसके परिणाम

(4) चित्तशुद्धि के उपाय (5) ऋृतम्भरा प्रज्ञा का स्वरूप

चतुर्थ   (1) क्रिया योग का स्वरूप एवं फल

(2) पंचक्लेश का स्वरूप, भेद एवं उनके नाश के उपाय।

(3) अनागत दुःख का हेयत्व एवं उसके हेतु का विवेकज्ञान द्वारा निवारण।

पंचम   (1) विवेक ख्यातियुक्त योगी की सात प्रकार की प्रज्ञा के लाभ।

(2) विवेक ख्याति की प्राप्ति हेतु योग के आठ अंगों का विशुद्ध विवेचन।

(3) योग का जीवन में प्रयोजन

PHIL 304 तर्कशास्त्र

Max. Marks : 60   **L   T   P   C**
(CA: 20 + ESA: 40)   **4   0   0   4**

यह प्रश्न पत्र पाँच अन्वितियों में विभक्त है प्रत्येक अन्विति के लिए 8 अंक निर्धारित है। प्रत्येक अन्विति से उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

इकाई तर्कशास्त्र / स्वहपब

प्रथम   (1) तर्कशास्त्र की परिभाषा एवं विषय क्षेत्र (Definition and Scope of Logic)

- (क) तर्कशास्त्र का स्वरूप व कार्य (Nature and the Function of Logic)
- (ख) युक्तियाँ : निगमनात्मक एवं आगमनात्मक (Arguments : Deductive and Inductive)
- (ग) सत्यता एवं वैधता (Truth and Validity)
- (घ) तर्कशास्त्र : विज्ञान और कला (Logic: Science and Arts)

द्वितीय   (2) भाषा : प्रयोग एवं कार्य (Language Uses and Functions)

- (क) सूचनात्मक, अभिव्यक्तात्मक व निदेशात्मक कार्य (Information, Expressive and Directive Function)
- (ख) मिश्रित प्रयोग (Mixed Functions)
- (ग) वाक्यों के प्रकार (Kinds of Sentences)
- (घ) सहमतियां – असहमतियां (Agreement, Disagreement)

परिभाषा (Definition)

- (क) अर्थ : विषयार्थ एवं गुणार्थ (Meaning : Denotation and Connotation)
- (ख) परिभाषा के उद्देश्य : परिभाषा के पाँच प्रकार (Purpose of Definition: Five Kind of Definition)

तृतीय   (3) तर्कवाक्य और उनके संबंध (Proposition and their Relation)

- निरुपाधिक तर्कवाक्यः गुण, परिमाण, व्याप्ति (Categorical Proposition: Quality, Quantity and Distribution)
- तर्कवाक्यों के परम्परागत संबंध : Traditional Relation of Proposition

- निरूपाधिक तर्कवाक्यों की आधुनिक व्याख्या : बूलीय सूत्र व वेन रेखाचित्र (Modern Interpretation of Categorical Proposition : Boolean Formulae and Venn Diagram)

चतुर्थ (4) न्यायवाक्य (Syllogisms)

- निरूपाधिक न्यायवाक्यः अवस्था व आकृति (Categorical Syllogisms :Mood and Eigure)
- तार्किक सारूप्य की विधि (Method of Logical Analogy)
- वैधता के नियम (Rules of Validity)
- प्रमेय, उपप्रमेय (Theorems, Sub Theorems)
- वेन रेखाचित्र पद्धति (Venn of Arguments)

पंचम (5) पंचमयुक्तियों का परीक्षण (Testing of Arguments)

- युक्ति और युक्ति आकार (Arguments and Argument forms)
- सत्यता – मूल्य प्रदान विधिया सत्यता– सारणी पद्धति (Method of Ascribing Truth Values or Truth Table Method)
- कथनों का परीक्षण Testing of statements
- संक्षिप्त सत्यता–सारणी पद्धति (Shorter Truth Table Method)
- विचार के नियम (Laws of Thought)
- कुछ प्रचलित तर्क दोष (Some Common Fallacies)
  (i) आकारिक तर्कदोष (Formal Fallacies)
  (ii) अनाकारिक तर्कदोष (Informal Fallacies)

पाठ्यपुस्तकों के नामः–

1. Introduction To logic: IRVING M. COPI
2. तर्कशास्त्र : श्यामकिशोर सेठ, नीलिमा मिश्र
3. निगमन तर्कशास्त्र : सिंह एवं सिंह
4. आधुनिक तर्कशास्त्र : डॉ. रमाशंकर मिश्र
5. तर्कशास्त्र का परिचय : संगमलाल पाण्डेय एवं गोरखनाथ मिश्र

Physical Education

First Semester

PHED 101 Introduction and History of Physical Education

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Have an understanding of genesis and history of sports and physical education and its development through the years.
- Understand of olympic philosophy and its importance.

Unit 1 Introduction to Physical Education

    I.   Definition & Meaning of Physical Education

    II. Meaning of the terms: Physical Culture, Physical Training, Game and Sport.

    III. The need, importance and scope of physical education in the modern society

    IV. Relationship and contribution of Physical Education to General Education.

Unit 2 Physical Education in Ancient Greece:

    I.   Sparta

      (i) Women at Sparta (ii) Education at Sparta

    II. Athens

      (i) Education   (ii) The Palaestra

      (iii) The Ephebose   (iv) The Gymnasium

    III. National Games & Festivals

    IV. Physical Education in Rome

      (i)   Education

      (ii) Roman Discipline

      (iii) The Field of Mars

      (iv) The Public Games

      (v) The Circus Maximus

      (vi) The Thermae

Unit 3 **Physical Education in India:**

 I. Pre-Vedic Period, Vedic Period, Epic Period

 II. Development of Physical Education in India during British period

 III. YMCA and its contribution

 IV. Indian Olympic Association (I.O.A.)

 V. Sports Authority of India (S.A.I.)

Unit 4 **Ancient Olympic Games:**

 I. Historical back ground.

 II. Golden rules and awards of Ancient Olympic Games.

 III. The organization & programmes of events in Ancient Olympic Games.

Unit 5 **Modern Olympic Games**:

 I. Contribution of Baron De Coubertain

  (i) Objectives

  (ii) Olympic Flag

  (iii) Olympic Motto

  (iv) Olympic Torch

  (v) Olympic Emblem

  (vi) Opening and closing ceremony

 II. National Sports Awards

  (i) Arjuna Award

  (ii) Dronacharya Award

  (iii) Rajiv Gandhi Khel Ratna Award

  (iv) Life Time Achievement Award

Recommended Books: -

1. Singh, Ajmer. (2016). *Essential of physical education. New Delhi, Kalyani Publisher.*

2. Singh, Ajmer. (2016). *Olympic Movement. New Delhi, Kalyani Publisher.*

3. Kamlesh, M.L. and Sangral, *Principles & History of Physical Education.*

4. Khan, Ejaz, Ahmed. (1961). *History of Physical Education.* Patna Scientific Books Co.

Reference Books: -

1. Krishnmurthy V. & Parameswara Ram, N. (1990). *Educational Dimensions of Physical Education.* (2nd Revised Ed.), Print India, New Delhi.

2. Leonard, Ered Eugene And Affleek, George, B. (1962). *Guide to History of Physical Education.* Philadelphia Hes and Febiger.

3. M.S. (1985). *Principles and History of Physical Education.* Prakash Brothers; Educational Publishers, Jalandhar.

4. Majumdar, D.C. (1952). *Encyclopedia of Indian Physical culture.* Baroda Good Companians.

5. Rajgopalan, KA. (1962). *Brief History of Physical Education in India.* Delhi Army Publishers.

6. Rice Emmelt A, Hutchinson, John, H. and Lee Morbol. (1960). *Brief History of Physical Education.* New York. The Ranald Press Co.

7. Sanborn, Marion A. & Hartman Betty C. (1982). *Issues in Physical Education*. 3rd Ed., Lea &Febiger, Philadelphia.

8. Sangral M.S. (1981). *Principles and History of Physical Education.* Prakash Kamlesh M.L. Brothers, Ludhiana.

9. Wekhakav D.G. (1983). *Mannual of Physical Education.* Bombay, Pearl Publishers Pvt. Ltd.

Suggested E-Learning Resources: -

1. https://epgp.inflibnet.ac.in/ahl.php?csrno=834

2. www.elearningresources.weebly.com

PHED 101L Games and Sports Skills-I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Develop motor skills necessary to participate successfully in a variety of physical activities.

- Understand fundamentals of various games, its rules and regulation.

A (I) Track & Field

    (i) Jumping event: Long Jump

    (ii) Throwing event: Shot Put

    (iii) Running event: 100 mt. start

(II) Gymnastics

    (i) Floor Exercise

    (ii) Balancing Beam

    (iii) Vaulting horse

B Secondary Sport (anyone)

    (I)   Throwball

    (II)   Hockey

    (III) Netball

    (IV) Martial Art (Combative Sport)

C Specialization (one major Sport)

    (i)   Basic Skills (Elementary)

Recommended Books: -

1. Timothty, Noakes. (2003). *Lore of Running* (4th ed.) US: Human Kinetics.
2. Tomlinson, Alan *A* Dictionary of Sports Studies. The Oxford Reference 2017. *My First Gymnastics Class Capucilli*, Alyssa Satin Simon and Schuster, 2017.

Suggested E-Learning Resources:

1. https://epgp.inflibnet.ac.in
2. epathshala.nic.in
3. Swayam.gov.in
4. www.wgcoaching.com
5. www.tandfoline.com

Second Semester
PHED 102 Foundation of Physical Education

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the nature and scope of physical education and the role of sport in today's world.

- Develop knowledge and understanding of biological, physiological, psychological and sociological foundations in physical education.

Unit 1   Physical Education: Its aim and objectives:
    I.   Introduction
        (i) Meaning of Aim, Objective and Foundation
    II.   Physical Education
        (i) Aim of Physical Education
        (ii) Objectives of Physical Education
        (iii) Physical Education for National and International integration

Unit 2   Biological Foundation:
    I.   Heredity and Environment and their influence on Performance.
    II. Principles governing physical and motor growth and development
    III. Anatomical and Physiological differences in male and female
    IV. Body types (Somato types)

Unit 3   Physiological Foundation:
    I.   General benefits of exercise
    II. Benefits of exercise on the various Systems
        (i) Circulatory system (ii) Respiratory system
        (iii) Muscular system   (iv) Nervous system
    III. Kinesthetic sense

Unit 4   Psychological foundation:
    I.   Basic concepts of:
        Impulse, Drives, motive, habits, emotion, anxiety, aggression, stress & motivation
    II. Theories of learning
        (i) Conditioning theory
           (a) Skinner   (b) I. Pavlov
        (ii) Gestalt theory
    III. The learning process
        (i) Law's of learnin
        (ii) Transfer of training/ learning

(iii) The learning curve

(iv) Factors and conditions which affect learning

Unit 5   Sociological Foundation:

I.   Physical Education and Sports as a need of society

II.   Game and Sport as man's cultural heritage

III. Need and Importance of leadership in Physical Education

Recommended Books: -

1. Singh, Ajmer. (2016). *Essential of physical education. New Delhi, Kalyani Publisher.*

2. Singh, Ajmer. (2016). *Olympic Movement. New Delhi, Kalyani Publisher.*

3. Bucher C.A. (1983). *Foundations of Physical Education andSport.* the C.V. Mosky Co. St. Louis Toroato-   London.

4. Kamlesh M.L. and Sangral, *Principles & History of Physical Education*.

Reference Books: -

1. Kamlesh, M.L. and Sangral: *Principles and History of Physical Education.*

2. Kamlesh, M.L. (1998). *Psychology in Physical Education and Sports*. Metropolitan Book Co., New Delhi.

3. M.S. (1985). *Principles and History of Physical Education.* Prakash Brothers; Educational Publishers, Jalandhar.

4. Skinner, Charles E.: (1984). *Educational Psychology*. Prentice Hall of India, New Delhi.

Suggested E-Learning Resources: -

1. https://epgp.inflibnet.ac.in/ahl.php?csrno=834

2. www.humankinetics.net

3. www.brainmac.com

PHED 102L Games and Sports Skills-II

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Learning Outcomes: After completion of this course, the students will be able to:

- Develop knowledge of basic skills like running, jumping, throwing, kicking, pulling etc.
- Learn basics of swimming, horse riding along with knowledge of Indian sports like kho-kho and kabaddi

A   Basic Sport (any one)

   I-   Swimming

       (i) Floating (ii) Start (iii) Basic Stroke

   II-   Equestrian

       (i)   Mount and Dismount

       (ii) Posture on the horse back, walk and change of direction (Right & Left)

B   Indian Sport (Any one)

   I-   Kho-Kho

   II-   Kabaddi

   III- Rope Malkhamb

C   Specialization (Continued from I Semester)

   I-   Basic Skills (Advanced)

Recommended Books: -

1. Timothty, Noakes. (2003). *Lore of Running* (4thed.). US: Human Kinetics.
2. Tomlinson, Alan A Dictionary of Sports Studies. The Oxford Reference 2017. *My First Gymnastics Class Capucilli*, Alyssa Satin Simon and Schuster, 2017.

Suggested E-Learning Resources:

1. https://epgp.inflibnet.ac.in
2. epathshala.nic.in
3. Swayam.gov.in
4. www.wgcoaching.com
5. www.tandfoline.com

Third Semester

PHED 201 Anatomy, Physiology and Exercise Physiology

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Develop an understanding of human body and its organs.

- Understand the effects of exercise on various systems of the body.

Unit 1 I - Introduction

      (i) Definition and meaning of Anatomy and Physiology

      (ii) Need and Importance of Anatomy and Physiology in Physical Education

      (iii) Meaning of Cell, Tissue, Organ & Systems in human body

      (iv) Structure and functions of Cell

      (v) Structure and functions of Tissue

  II- Skeletal System:

      (i) Bone: Structure, functions and its classification.

      (ii) Classification of joints

      (iii) Movements around various joints

Unit 2 I- Cardio Vascular System:

      (i) Heart; its structure and function

      (ii) Cardiac Cycle

      (iii) Cardiac output

      (iv) Blood, its function & Blood pressure

  II- Respiratory System:

      (i) Pulmonary ventilation and regulation of respiration

      (ii) Vital capacity

      (iii) Second wind

(iv) Oxygen Debt

Unit 3 I- Muscular System:

      (i) General structure of the Muscle (ii) Types of Muscle

      (iii) Muscular contraction and its types. (iv) Fatigue

    II- Endocrine Glands:

      (i) Secretion of endocrine glands:

      (ii) Role of their secretion on growth & development and body functions

Unit 4 I- Digestive System:

      (i) Brief description and location of different parts of digestive tract

      (ii) Mechanism of digestion.

    II Excretory system:

      (i) Excretion of waste from the body; from kidney, skin and lungs.

Unit 5 Nervous System:

    I Neurons, Nerve-synapse, spinal-cord and its functions

    II Reflex Action

    III Central Nervous System and Autonomous Nervous System

Recommended Books: -

1. Singh, Ajmer. (2016). *Essential of physical education. New Delhi, Kalyani Publisher.*

2. Singh, Ajmer. (2016). *Olympic Movement. New Delhi, Kalyani Publisher.*

3. Anthony, C. Parher & Kolthoof, N. Jane. (1995). *Text Book of Anatomy and Physiology.* St. Louis: The C.V. Mosby Company.

Reference Books: -

1. Chourasia, B.D. (1981). *Handbook of General Anatomy.* New Delhi. CAS Publishers.

2. Clarke, David H. (1995). *Exercise Physiology.* New jersey: Prentice Hall Inc. Englewood Cliffs.

3. Mathew, D.K. and Fox E.L. (1976). *Physiological basis of Physical Education and athletics.* W.B. Saunders Company, Philadelphia.

4. Morchouse, L.E. and Miller A.T. (1976). *Physiology Exercise.* C.V. Mosby Company, Saint Louis.

5. Myshne, David A. (1982). *Human Anatomy and Physiology*. Moscow: Mir Publishers.

6. Pearce, Evelyn, C. (1989). *Anatomy and Physiology for Nurses.* Calcutta: Oxford University press.

7. Wilmore, J.H. and Costill, D.L. (1999). *Physiology of Sports and Exercise*. Champaign IL: Human Kinetics.

Suggested E-Learning Resources: -

1. www.wgcoaching.com

2. www.tandfoline.com

3. www.brainmac.com

4. https://epgp.inflibnet.ac.in/ahl.php?csrno=834

5. www.css.edu.com/Www.researchgate.net

PHED 201L Games and Sports Skills - III

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Learning Outcomes: After completion of this course, the students will be able to:

- Develop knowledge of basic gymnastic movements

- Develop advance knowledge in a game of specialization.

A   Basic Sports (anyone)

    I- Track & Field

        (i) Middle Distance Race: 800 mts.

          (ii) Jumping event: High Jump

          (iii) Throwing event: Discuss

     II- Gymnastic

          (i)   Uneven bar

          (ii) Rhythemic Gymnastic

          (iii) Aerobic Dance

B   Secondary Sport (any one)

     I-   Softball

     II- Handball

     III- Volleyball

     IV- Archery

C   Specialization (Continued from II Semester)

     I-   Technique (Advance)

Recommended Books: -

1. Timothty, Noakes. (2003). *Lore of Running* (4[th]ed.). Human Kinetics.
2. Tomlinson, Alan A Dictionary of Sports Studies. The Oxford Reference 2017. *My First Gymnastics Class Capucilli*, Alyssa Satin Simon and Schuster, 2017.

Suggested E-Learning Resources:

1. https://epgp.inflibnet.ac.in
2. epathshala.nic.in
3. Swayam.gov.in
4. www.wgcoaching.com
5. www.tandfoline.com

Fourth Semester

PHED 202 Health Education and First-Aid

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

• Apply the knowledge of health education and hygiene towards the welfare of society.

• Manage causality with minor injuries like sprain, strain, bleeding, inflammation etc.

Unit 1   Health Education:

      I-   Meaning

      II-   Definition

      III-   Aim

      IV-   Objectives

      V-   Principles of health education

      VI-   Importance of health education

Unit 2   Mental Health:

      I-   Its meaning and causes

      II-   Relationship between Mental and Physical health

      III-   Dimensions of Health

Unit 3   I-   Hygiene:

          (i)   Personal Hygiene

          (ii)   Food Hygiene

          (iii) Environmental Hygiene

      II-   Prevention of communicable diseases

      III-   Modes of disease transmission

Unit 4   School health Programme:

      I -   Health appraisal of school children and school personnel

      II -   Healthful school environment and nutritional services

      III-   Mid-day school meal programme

      IV-   Dental and eye health

Unit 5 First-Aid:

    I- Introduction

    II- Types of First-Aid (self Aid & First-Aid)

    III- First-Aid Box

    IV- Reasons of sports injuries

    V- Principles of first Aid

    VI- Functions of First Aider

    VII- The First-Aid and emergency care in various cases.

Recommended Books: -

1. Singh, Ajmer. (2016). *Essential of physical education. New Delhi, Kalyani Publisher.*

2. Singh, Ajmer. (2016). *Olympic Movement. New Delhi, Kalyani Publisher.*

3. Park, J.E. & Park, K. (1983). *Preventive and Social Medicine.* Jabalpur: M/s. Banavidas Bhanot Publishers.

Reference Books: -

1. Anderson, C.L. and Chewell, William H. (1986). *School Health Practice.* St. Louis: The C.V.' Mosby Company.

2. Bedi, Yashpal. (1985). *Social and Preventive Medicine.* New Delhi, Atmaram and Sons.

3. Dandiya, P.C., Jafer, Z.Y.K. & Jafer Afifa. (1996), (1998). Repaint.*Health Education and Community Pharmacy.* (2nded.), Vallabh Prakashan, New Delhi.

4. Kanpur, N and Baliga, M. (1981). *Elements of Health Education.* Pitambar Publishing Company, (2nd revised Ed.). Karol Bagh, New Delhi.

5. Park, J. & Park, K. (1985). *Text Book of Preventive and Social Medicines.* (10thed.), BanarasiDassBhanot, Jabalpur.

6. Ramachandran, L. & Dharmalingam, T. (1993). *Health Education: A New Approach.* Vikas Publishing House, New Delhi.

7. The St. John Ambulance Association of India, (1963). *First Aid.* 1. Red Cross Road, New Delhi.

8. Yudenich, V.V. (1982). *Accident First Aid.* Mir Publishers, Moscow.

Suggested E-Learning Resources: -

1. https://epgp.inflibnet.ac.in/ahl.phpcsrno=834
2. www.missiontolearn.com
3. www.aid-training.co.uk

PHED 202L Games and Sports Skills - IV

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**0**	**0**	**8**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

*   Perform advance skills of swimming and horse riding.
*   Play one racquet game.

A.   Basic Sport (Anyone)

   I-   Swimming (Any two stroke)

      (i)   Breast stroke

      (ii) Back stroke

      (iii) Free style

      (iv) Butter fly

   II-   Equestrian

      (i)   Proficiency in Trot & Balance

      (ii) Canter

B.   Racquet Game

   I-   Table Tennis

C.   Specialization (Continued from III Semester)

Recommended Books: -

1. Timothty, Noakes. (2003). *Lore of Running* (4th ed.). US: Human Kinetics.
2. Tomlinson, Alan A Dictionary of Sports Studies. The Oxford Reference 2017. *My First Gymnastics Class Capucilli*, Alyssa Satin Simon and Schuster, 2017.

Suggested E-Learning Rseources:

1. https://epgp.inflibnet.ac.in
2. epathshala.nic.in

3. Swayam.gov.in
4. www.wgcoaching.com
5. www.tandfoline.com

Fifth Semester

PHED 301L Games and Sports Skills - V

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Learning Outcomes: After completion of this course, the students will be able to:

- Have competency in one specialized game.
- Understand basics of all secondary /minor games.

A   Heptathalon (Four events)

    i-   Long Jump

    ii-   200 mt. Race

    iii-   800 mt. Race

    iv-   High Jump

B   Secondary Sport (anyone)

    i-   Cricket

    ii-   Basketball

    iii-   Football

    iv-   Tennikoit

    v-   Tennis

C   Specialization (Continued from IV Semester)

    Test will be conducted in its skills, rules and regulations.

    I-   Specialization skill test

        (i)   Hockey: Harbans Singh Hockey test

        (ii)   Basketball: Johnson Basketball ability test

        (iii)   Volleyball: Brady Volleyball test

        (iv)   Badminton: Lockart and Mc Pherson Badminton test

        (v)   Soccer: Mc Donald Soccer test

        (vi)   Cricket

     (vii) Tennis

     (viii) Swimming

     (ix) Football

     (x)   Hand ball

     (xi) Netball

     (xii) Softball

Recommended Books: -

1. Timothty, Noakes. (2003). *Lore of Runnign* (4thed.). US: Human Kinetics.

2. Tomlinson, Alan A Dictionary of Sports Studies. The Oxford Reference, 2017. *My First Gymnastics Class Capucilli*, Alyssa Satin Simon and Schuster, 2017.

Suggested E-Learning Resources:

6. https://epgp.inflibnet.ac.in

7. epathshala.nic.in

8. Swayam.gov.in

9. www.wgcoaching.com

10. www.tandfoline.com

Sixth Semester

PHED 302L Games and Sports Skills - VI

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Develop an understanding of heptathlon in athletics.
- Develop an understanding of yogasasna for fitness.

A.   Heptathalon events

     I-   Hurdle

     II-   Shot-put

     III- Javelin

B.   Racquet game

     I-   Badminton

C.   Specialization (Continued from V Semester)
  I-   Skill test
  II-   Specialization record book
D.   Yoga Asanas- (20 Asanas)
  I-   Meditative
  II-   Body Building
  III- Relaxive

Recommended Books: -
1. Timothty, Noakes. (2003). *Lore of Running* (4ᵗʰed.). US: Human Kinetics.
2. Tomlinson, Alan A Dictionary of Sports Studies. The Oxford Reference, 2017. *My First Gymnastics Class Capucilli,* Alyssa Satin Simon and Schuster, 2017.

Suggested E-Learning Resources:
1. https://epgp.inflibnet.ac.in
2. epathshala.nic.in
3. Swayam.gov.in
4. www.wgcoaching.com
5. www.tandfoline.com

Discipline Electives

PHED 301 Scientific Principles of Sports Training

Max. Marks : 100	**L T P C**		

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After completion of this course, the students will be able to:

-   Apply Scientific methods of sports training for preparation of sportsman for competitions.
-   Realize and apply methods of technique and tactical training.
-   Understand of psychological preparation for competition.

Unit 1   I   Sport Training:
  (i) Definition, Aim and Characteristics of sports training
  (ii) Principles of sports training

    II   Training Load:

       (i) Meaning, Definition and Importance

       (ii) Principles of training load

       (iii) Adaptation process and conditions of adaptation (Super compensation)

Unit 2   Motor Components:

    I   Strength

       (i)   Meaning, Definition and Importance

       (ii) Types of Strength

    II   Endurance

       (i)   Meaning, Definition and Importance

       (ii) Form or classification of Endurance

Unit 3 I   Speed:

       (i)   Meaning, Definition and Importance

       (ii) Speed abilities

    II **Flexibility:**

       (i) Definition (ii) Importance

       (iii) Meaning (iv) Types

    III **Coordinative abilities:**

       (i) Meaning & Definition

       (ii) Classification (iii) Importance

Unit 4 I   Technique:

       (i)   Meaning

       (ii) Definition of skill, technique and style

       (iii)Methods of technique training

    II **Tactics:**

       (i)   Meaning (ii) Principles of tactical preparation

Unit 5 I   Periodisation:

       (i)   Meaning, Definition and Importance

       (ii) Top form and periodisation

    II **Competition:**

       (i)   Meaning

       (ii) Preparation for competition

       (iii) Psychological

Text Books:

1. Singh, Hardyal (1991). *Science of Sports Training*. New Delhi: DVS Publications.

2. Singh, Ajmer. (2016). *Essential of physical education. New Delhi, Kalyani Publisher.*

3. Singh, Ajmer. (2016). *Olympic Movement. New Delhi, Kalyani Publisher.*

Reference Books:

1. Dick, Frank W. (1980). *Sports Training Principles*, London: Lepus Books.

2. Dict F.T. (1980). *Sports Training Principles.* Upus, London.

3. Jenson, C.R. Fisher, A.G. (1972). *Scientific Basis of Athletic conditioning Lea and Febiger.* Philadelphia.

4. Matveyew, L.P. (1981). *Fundamentals of Sports Training.* (Translation from Russian) Mr. Publisher, Moscon.

Suggested E-Learning Resources:

1. https://epgp.inflibnet.ac.in/ahl.php?csrno=834

2. www.verywellfit.com

3. www.ncbi.nlm.nih.gov

PHED 302 Introduction to Yoga

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Understand of Yoga philosophy.
- Understand of Yoga Asana and Pranayam.
- Understand and apply Shatkarma for internal cleansing of the body.

Unit 1 Concept of Yoga System:

I-   Meaning, Definition and Importance

II-   Asthang Yoga

III- Types of Yoga

(i)   Hath Yoga   (ii) Gyan Yoga

(iii) Karma Yoga   (iv) Raj Yoga

IV- Historical back ground of the development of Yoga

Unit 2 Asanas:

I- Meaning, Definition and Importance

II- Types of Asanas:

(i) Meditative (ii) Body Building

(iii) Relaxive

III- Precautions and Prerequisites while performing Asanas

Unit 3 Pranayam:

I- Meaning, Definition and Importance

II- Types of Pranayam

III- Precautions to be observed while performing Pranayam

IV- Techniques of performing Pranayam

Unit 4 Women and Yoga:

I- Importance of Yoga for women

II- Three milestones in women's life and Yoga

III- Do's and Don'ts of Asanas for women.

Unit 5 Yogic Methods of Personal Hygiene (Shatkriya):

I- Dhauti   II- Vasti   III- Neti

IV- Tratak   V- Nauli   VI- Kapal Bhati

Text Books: -

1. Iyengar, B.K.S., (1981). *Light on Pranayama.* Harper Colling Publisher, India.

2. Iyengar, Geeta S. (2002). *Yoga: A Gem for Women*. Allied Publishers Pvt. Ltd.

3. Iyenger, B.K.S. (1982). *Light on Yoga.* Great Britain, George Allen and Unwin.

Reference Books: -

1. Ananda, Sri. (1999). *The Complete Book of Yoga Harmony of Body and mind*. Orient paperbacks. Madarsa Road, Kashmere Gate, Delhi.

2. Das, Gupta & Surendranath. (1987). *Yoga: As Philosophy & Religion.*

3. Joshi, K.S. (2003). *Yogic Pranayam.* Allied Publishers Pvt. Ltd.

4. *Niranjanananda, Paramahamsa, Yoga Darshan, Vision on Yoga upnishads*. (1993). Sri PanchdashnamParanahamsaAlakh Bara, Deoghar, Bihar, India.

5. Pratap, Vijayendra; (1993). *A Teacher's Guide for Beginning Yoga*. Akash Prakashan, Preet Vihar Vikas Marg, New Delhi.

6. Saraswati, Swami Satyananda; (1995) *Asana Pranayama Mudra*. Bandha. Bihar School of Yoga Ganga Darshan Munger, Bihar, India.

7. Sharma, S.K. (2008). *Practical Yoga*. 7/12, Ground Floor, Ansari Road, Dariya Gang, New Delhi.

8. Sharma, Lalita. (1999). *All you wanted to know about Yoga*. Sterling Publishers Private Limited.

9. Singh, L.A. (2002). *Yogic Philosophy: Methods and approaches* Allied Publishers Pvt. Ltd.

10. Sinha, Phulgenda. (2003). *Yogic cure for common diseases.* Allied Publishers Pvt. Ltd.

Suggested E-Learning Resources: -
1. www.missiontolearn.com
2. www.mhfa.com.au
3. www.aid-training.co.uk

PHED 303 Adapted physical Education

Max. Marks : 100   L   T   P   C
(CA: 40 + ESA: 60)   4   0   0   4

Learning Outcomes: After completion of this course, the students will be able to:

- Understand and adapted physical education for disabled.
- Understand adapted sports activities and encourage participation
- Understand nature of disabilities its causes and prescribe programme accordingly.

Unit 1: Meaning of Adaptive and Corrective Physical Education:
    I-   Meaning and History of adapted Physical Education
    II- Functions of Adapted Physical Education
    III- Objectives of Adapted programme
    IV- Individuals with Disabilities Education Act (IDEA) of USA.

V- History of adapted sports.

VI- Current status of Adapted Physical Education.

Unit 2: Massage:

I- Basic Techniques-

    i) Stroking (Effleurage)

    (ii) Kneading (Petrissage)

    (iii) Rubbing (Friction)

    (iv) Hacking

    (v) Thumping & slapping

    (vi) Vibration & shacking

II- Conditions for application of massage

Unit 3: Nature of Disabilities

I- Low Physical Fitness

    (i) Nature, Causes, Components,

    (ii) Tests, Development of Physical Fitness.

II- Inefficient Body mechanics

    (i) Causes

    (ii) Programme to improve Body mechanics.

III- Visual impairments

    (i) Causes

    (ii) Programme

IV- Auditory impairments:

    (i) Causes

    (ii) Programme.

V- Orthopedic Handicaps

    (i) Nature, Programme Planning

    (ii) Postural deviations: Exercise programme to improve posture

Unit 4: Movement:

I- Active Movement

    (i) Voluntary Movement:

        a) Free exercise-classification technique, effects

        b) Assisted exercise- Technique, effects

        c) Assisted-Resisted Exercise-Technique, effects.

(ii) Involuntary Movement:

    a) Reflex Movement, effects

II- Passive Movement: -

    (i) Relaxed passive Movement.

    (ii) Definitions, principles, effects and uses.

    (iii) Passive manual mobilization techniques

III- Possible treatments with Physical therapy and remedial exercises for:

    (i) Sprains

    (ii) Contusions

    (iii) Luxation

    (iv) Fractures

    (v) Muscle pull & Tear

    (vi) Cramps

    (vii) Inflamed muscle

    (viii) Strained and pulled Tendons

    (ix) Torn Tendon.

Unit 5: Treatments:

I- Passive treatments:

    (i) Uses of Heat, Dry Heat and Moist Heat

    (i) Uses of Cold Therapy.

    (iii) Hydrotherapy

II- Active Treatments:

    (i) Strengthening

    (ii) Loosening

    (iii) Stretching

    (iv) Exercises in water

    (v) Neuromuscular facilitation

Text Books:

1- Singh, Ajmer. (2016). *Essential of physical education. New Delhi, Kalyani Publisher.*

2- Singh, Ajmer. (2016). *Olympic Movement. New Delhi, Kalyani Publisher.*

3- Park, J.E. & Park, K. (1983). *Preventive and Social Medicine.* Jabalpur: M/s. Banavidas Bhanot Publishers.

References:

1. Winnicks, J.P. (4thed.) (2005). Adapted Physical Education and Human Kinetic's. www.humankinetics.com.

2. Clarke, Harrison H. & Clarke, David (1963). Development and Adapted Physical Education. H. Englewood Cliffs N.J. Prentic Hall, inc.

3. Fait, Holis F. Phiadelphia (1962). Adapted Physical Education. W.B. Saunders Co, Philadelphia.

4. Auxter, David, Pyfer Jean, Huetting carol, Mosby, (1993). Adapted Physical Education and Recreation, Year Book inc.

5. Eitner, Doris, Meissner Buty, Ork, Helmut (1982). Physical Therapy for Sports., W.B. Saunders Company, Philadelphia.

6. Dena, M. C.B.S. (1985). The Principles of Exercise Therapy Gardiner. Publishers and Distributors, Delhi, 1985.

7. Friz, Sandy (2005). Sports & Exercise massage, Elsevier Mosby.

Suggested E-Learning Recurse:

1. https://epgp.inflibnet.ac.in/ahl.phpcsrno=834

2. www.missiontolearn.com

3. www.aid-training.co.uk

PHED 304 Corrective Physical Education and Rehabilitation

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After completion of this course, the students will be able to:

- Understand causes of sports injuries and its rehabilitation
- Understand & apply therapeutic exercises
- Demonstrate and take preventive and curative measures in sports injuries.

Unit 1 Corrective Physical Education:

I- Definition, Objectives and Scope of Corrective Physical Education

II- Rehabilitation Principles and Program

III- Rehabilitation of athletic injuries: Passive, Active, Assisted, Resisted exercise for rehabilitation, Stretching, PNF techniques and Principles.

Unit 2 Posture:

I- Meaning, Definition of posture and postural education

II- Dynamic and static postures

III- Common postural deformities: Kyphosis, Lordosis, Scoliosis, Knock Knee, Bow leg, Flat Foot

IV- Causes for Deviations, their treatment and suggested corrective exercises.

V- Posture test, Examination of the Spine, Kyphosis, Lordosis, Scoliosis, Knock Knee, Bow Leg, Flat Foot.

VI- Drawbacks and causes of bad posture.

Unit 3 Preventive Measures of Sports Injuries:

I- Protective Sports Equipments

II- Training and conditioning techniques

(i) Nutritional considerations

(ii) Environmental considerations

III- Mechanism and characteristic of sports trauma

IV- Bandaging and Tapping

V- Tissue response to injury

VI- Psychological intervention for sports injuries

VII- Warm up and Cool down.

Unit 4 Massage Manipulation:

I- Brief history of massage

II- Massage as an aid for relaxation

III- Points to be considered in giving massage

IV- Physiological, Chemical, Psychological effects of massage

V- Indication / Contra indication of Massage

VI- Classification of the manipulation and their specific uses in the human body

    (i)   Stroking

    (ii) Pressure

    (iii) Percussion

    (iv) Shaking.

Unit 5 Therapeutic Modalities:

I- Care and treatment of exposed and unexposed injuries in sports

    (i)   Hydrotherapy

    (ii)   Contrast bath, infrared rays

    (iii) Ultraviolet Rays

    (iv) Ultrasound

    (v)   Short wave diathermy therapy

    (vi) Wax

    (vii) Traction.

Text Books:

1. Singh, Ajmer. (2016). Essential of physical education. New Delhi, Kalyani Publisher.

2. Singh, Ajmer. (2016). Olympic Movement. New Delhi, Kalyani Publisher.

3. Bucher, C.A. (1983). Foundations of Physical Education and Sport. the C.V. Mosky Co. St. Louis Toroato-London.

References:

1- Dohenty, J. Meno.Wetb, Moder D (2000). Track & Field, Englewood Cliffs, Prentice Hal Inc.

2. Lace, M. V. (1951). Massage and Medical Gymnastics, London: J & A Churchill Ltd.

3. Mc Ooyand, Young (1954). Tests and Measurement, New York: Appleton Century.

4. Naro, C. L. (1967). Manual of Massage and, Movement, London: Febra and Febra Ltd.

5. Rathbome, J.l. (1965). Corrective Physical education, London: W.B. Saunders & Co. Stafford and Kelly, (1968). Preventive and Corrective Physical Education, New York.

Suggested E-Learning Recurse:

1. https://epgp.inflibnet.ac.in/ahl.phpcsrno=834
2. www.missiontolearn.com
3. www.aid-training.co.uk

PHED 305 Methods in physical education

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After completion of this course, the students will be able to:

- Understand various teaching methods in physical education.
- Conceive plans to organize tournaments.
- Develop command over play field markings.

Unit I Teaching Methods:

- I- Meaning of the term "Teaching Methods", its scope and importance.
- II- Types of Methods: Part whole method whole part method, Command Method, Discussion Method, Project Method, Demonstration Method and Imitation Method.
- III- Principles of Teaching.

Unit II Teaching Technique:

- I- Presentation Technique
- II- Personal preparation
- III- Technical preparation
- IV- Steps of presentation
- V- Commands and their technique
- VI- Situation, which require different words of command.
- VII- Types of formations
- VIII- Principles of class management

Unit III Lesson Planning:

- I- Types of lessons and their values
- II- Objectives of different lesson plans and parts of the lessons, Introductory and development.

III- Skill practice/group work.

IV- Class activity/Recreation part (Reassembly, Revision and dismissal)

Unit IV Tournaments:

I- Organization, meaning and their types.

II- Methods of drawing Fixtures.

III- Knock-out type of Elimination, double elimination tournaments

IV- League-(Single-Double) or Round Robin type

V- Combination type of tournament.

VI- Challenges or pyramidal type (Ladder-Pyramid type)

Unit V Teaching Aids:

I- Audio-Visual aids and Teaching gadgets.

II- Track and fields and various Play fields/ Courts Markings.

III- Track and fields (Standard)- Track- 400 mtrs. and 200 mtrs.

IV- Play fields/Courts- Basketball, Hockey, Kabaddi, Kho-Kho, Softball, Tennis, Badminton, Football, Cricket, Archery and Volleyball as per international regulations.

Text Books:

1. Sangaral, Kamlesh, Methods in Physical Education, Prakash Brothers, Indiana.

REFERENCE:

1. Tirunarayanan C. & Hariharan S, "Methods in Physical Education". South India press, Karai Kudi 1962.

2. Kogman. B, Cassidy, Rosalind and Jackson, C.O."Methods in Physical Education": W.B. Saunder Company, London 1960.

3. Knapp, Clyde and Hagman, E.P. 'Teaching Methods for Physical Education'. Mc Graw Hill Book Co. New York 1948.

4. Bucher Charles, A, Koenic Constance R. Barnhard Milton. Methods and Material for secondary schools physical edu. Saint Louis; The C.V. Mosby Company, 1970.

Suggested E-Learning Recurse:

1. https://epgp.inflibnet.ac.in/ahl.phpcsrno=834

2. www.missiontolearn.com

3. www.aid-training.co.uk

POLITICAL SCIENCE

First Semester

POL 102 Foundations of Political Science

Max. Marks : 100   L   T   P   C
(CA: 40 + ESA: 60)   4   0   0   4

Unit 1 Introduction to Political Science: Meaning, Nature and Scope of Political Science: Traditional and Modern Perspective, Significance of the discipline of Political Science.

Unit 2 Approaches to the study of Political Science: Normative, Historical and Behavioral Approach.

Relationship of Political Science with other Social Sciences : Philosophy, Geography, History, Sociology and Economics.

Unit 3 State : Meaning, Origin, Development and elements. Sphere of State Activity: Laissez-faire, Socialist and concept of Welfare State.

Unit 4 Sovereignty : Meaning, Monistic and Pluralistic theory of sovereignty, Challenges to Sovereignty in Post Globalised Era.

Liberty : Meaning, Types and Evaluation of the Concept.

Equality : Meaning and Types, Relationship between Liberty and Equality.

Unit 5 Justice: Meaning, Sources and Types, Citizenship: Meaning and Types, Rights: Meaning, types.

Learning Outcomes: After completion of this course, the students will be able to:

- Comprehend the ideas and concept of Political Theory in depth .
- Identify the significance and relevance of political theory in present scenario.
- Analyze and discuss political ideas critically.
- Underst and their rights and duties.
- Perceive the idea of citizenship and this will help them to develop as good citizens of India.

Recommended Books:

1. Asirvatham, Eddy. (1968). *Political Theory*. University of California: Upper Indian Publishing House. (Hindi and English Ed.)

2. Pennock, J.R. & Smith, D.G. (1964). *Political Science-An Introduction.* New York: Macmilillon Company.

3. Dubey, S .N. (1996). *Rajniti Shastra Ke Siddhant. Agra:* Shivlal Agrawal and Co. Agra.

4. Pant, A. D. (1968). *Rajniti Shastra Ke Mool Adhar* Allahabad: Marg I Kitabghar.

5. Das, Hari Har (1997). *Analytical study of Political science*. New Delhi: Anmol Publications Pvt. Ltd.

6. Ramaswamy, Sushila. (2015). *Political Theory: Ideas & Concepts*. New Delhi: Macmillan.

7. Johri, J.C. (2009). *Principles of Modern Political Science*. New Delhi: Sterling Publishers Pvt. Ltd.

8. Agarwal, R.C. (2014). *Political Theory.* New Delhi: S.Chand, & Co. Ltd.

9. Das, Heri Har & Choudhary, B. C. (1999). *Political Theory: Traditional and Modern Theory*. New Delhi: National Publishing House Jaipur.

10. Held, D. (1989). *Political Theory and the Modern state.* New Delhi: Maya Publishers Pvt. Ltd.

Suggested e-resources-

- **https://epgp.inflibnet.ac.in/ahl.php?csrno=29**Annual Review of Political Science, http://www.annualreviews.org/journal/polisci, Annual Reviews

- Political Methodology, http://www.jstor.org/action/showPublication?journalCode=polimethod, Oxford University Press;Society for Political Methodology

- Annual Review of Political Science http://www.annualreviews.org/journal/polisci

- PS: Political Science and Politics http://www.jstor.org/action/showPublication?journalCode=pspolisciepoli

- Proceedings of the Academy of Political Science in the City of New York http://www.jstor.org/action/showPublication?journalCode=procacadpolisci2

POL 103 Indian Political Thinkers

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Kautilya: Social Ideas: Varna Ashrama System; Political Ideas: Origin of State, Saptang Theory and Dand Niti; Administrative Ideas and Mandal Theory.

Unit 2 Raja Ram Mohan Roy: Social Ideas, Economic Ideas and Political Ideas.
Swami Vivekanand: Social Ideas, Religious Idea and Political Ideas.

Unit 3: Gokhale: Economic Ideas; Spiritualization of Politics, Liberal Ideas and Political Testament. Tilak: Social Ideas, Political Ideas: Nationalism and Concept of Swaraj.

Unit 4 Gandhi: Social Ideas, Economic Ideas, Political Ideas: Concept of State, Staya, Ahimsa, Satyagrah.

Unit 5 Nehru: Political Ideas: Democratic Socialism, Humanism, Nationalism and Internationalism. Ambedker: Social Ideas, Economic Ideas and Political Ideas.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the social, political and economic ideas of Indian political thinkers.

- Compare the ideas of key political thinkers in India.

- Analyze political thought from ancient to the modern era.

Recommended Books:

1. Verma, V. P. (2017). *Modern Indian Political Thought.* Lakshmi Narayana Educational publishirs.

2. Nehru, J. L. (2002). *The Discovery of India*. New Delhi: Oxford University Press.

3. Bhagavan, V. (1999). *Indian Political Thinkers*. New Delhi: Atma Ram & Son.

4. Gaba, O.P.(2016) *Indian Political Thought.* Delhi: Mayur Paper back.

5. Roy, Himanshu and Singh , M.P.(2003). *Indian Political Thought*. Delhi:

6. Narayan, J.P., and Chakravarty, Bidut (2009). *Modern Indian Political Thought* .New Delhi: Sage Publishares.

7. Mehta,V.R. (1995). *Foundation of Indian Political Thought*. Delhi: Manohar Publishars

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29
- Social Justice
  http://www.jstor.org/action/showPublication?journalCode=socijust
- Section of Individual Rights and Responsibilities Newsletter
  http://www.jstor.org/journal/secindrigresnew

Second Semester

POL 105 National Movement and Constitutional Development of India

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Indian Nationalism : Genesis of the Indian National Congress: Moderates and Extremists

Revolutionary Perspective of National Movement.

Unit 2 Home Rule Movement, Non-Cooperation Movement, Swaraj Party, Nehru Report, Civil Disobedience Movement

Unit 3 Emergence of Communal Politics : Muslim League, Fourteen Points of Jinnah,Two nation Theory, Communal Award, Poona Pact, Hindu Revivalism.

Unit 4 Towards Freedom: Cripps Mission, Quit India movement, Cabinet Mission, Mount Batten Plan, Partition of India. Role of Women in National movement in India

Unit 5 An introduction to the constitutional development in India.

Main features and provisions of the Acts of 1909, 1919, 1935 and 1947.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the National Movement and Constitutional Development in India.
- Analyze the National Movement from various perspectives.

- Comprehand the women's participation in National Movement.

Recommended Books:

1. Agarwal, R.C. (2001). *Indian Government and Politics*. New Delhi: S. Chand & Company Ltd.

2. Chandra, B. (1981). *All India's Struggle for Independence*. New Delhi: penguin.

3. Chattopadhayaya, K. D. (1983*). Indian's Women's struggle for freedom.* New Delhi: Abhinav Publications.

4. Kasturi, I. & Majumdar, V. (1994*). Women and Indian Nationalism.* New Delhi: Vikas Publishing House

5. Kaur, M. (1968). *Role of Women in the Freedom Movement* 1859-1947. New Delhi: Starly.

6. Sharma, R.K. (1981) – Nationalism, *Social Reform and Indian Women*. New Delhi: Janki Prakashan.

7. Chandra, B. and et. Al., (1989). *India's Struggle for Independence*. New Delhi: Penguin. (In Hindi also)

8. Jones, M. (1974). *Government and Politics in India.* Delhi: BI Publications.

9. Munshi, K.M. (1963). *The President Under the Indian Constitution*. Bombay: Bharatiya Vidya Bhavan.

10. Myrdal. G. (1968). *Asian Drama: An Inquiry into the Poverty of Nations*. Harmondsworth: Penguin.

11. Narain, I. (ed.), (1967). *State Politics in India*. Meerut: Meenakshi Prakashan.

12. Kaushik, S. (ed.,) (1990). *Indian Government and Politics*. Delhi University: Directorate of Hindi.

13. Kaviraj, S. (1998). *Politics in India*. Delhi: Oxford University Press.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- The National Interest
  http://www.jstor.org/action/showPublication?journalCode=nationalinterest

- Nationalism and Ethnic Politics-
  http://www.tandfonline.com/loi/fnep20

POL 108 Principles of Political Science

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1   Government: Meaning, Organs: Legislature, Executive and Judiciary and their relationship.

Unit 2   Forms of Government: Democracy: Meaning, Types, Theories of Democracy- Classical, Liberal and Marxist.   Models of Democracy – Representative, Participatory and Deliberative.

Dictatorship: Meaning, Types. Authoritarian and Totalitarian.

Unit 3   Forms of Government: Unitary Government; Meaning, Main Features, Merits and Demerits,

Federal Government; Meaning, Main Features, Essential Conditions, Merits and Demerits.

Unit 4   Forms of Government: Parliamentary Government; Meaning, Main Features, Merits and Demerits.

Presidential Government: Meaning, Main Features, Merits and Demerits.

Unit 5   Party System: Meaning and Importance of Political Parties, Basic Characteristics and Types of Party System. Role of Political Parties in the Political System.

Pressure Groups**:** Meaning, Classification and Methods, Importance of Pressure Groups in Democracy.

Learning Outcomes: After completion of the course, the students will be able to:

- Comprehend the ideas and concept of political theory in depth.
- Develop their knowledge about the various forms of government
- Compare governments of various countries.
- Critically analyze and discuss political Systems.
- Understand the qualities of a democracy and conditions of successful working of a democracy.

Recommended Books :

1. Asrivatham, Eddy. (1968), *Political Theory*. University of California: Upper Indian Publishing House. (Hindi and English Ed.)

2. Pennock, J.R., & Smith, D.G,(1964). Political Science-An Introduction. NewYork: Macmilillon Company.

3. Dubey, S.N. (2017). *Rajniti Shastra Ke Siddhant.* Agra: ShivlalAgrawal and Co.

4. Das, Hari Har (1997). *Analytical study of Political science.* New Delhi: Anmol Publications Pvt. Ltd.

5. Ramaswamy, S. (2015). *Political Theory*: *Ideas & Concepts.* New Delhi : Macmillan.

6. Johri, J.C. (2009). *Principles of Modern Political Science.* New Delhi: Sterling Publishers Pvt. Ltd.

7. Agarwal, R.C. (2014). *Political Theory*. New Delhi: S.Chand, & Co. Ltd

8. Das, Heri Har & Choudhary, B.C. (1997). *Political Theory: Traditional and Modern Theory.* New Delhi : National Publishing House.

9. Held, D. (1989). *Political Theory and the Modern state*. New Delhi: Maya Publishers Pvt. Ltd.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29
- Political Theory-
  http://www.jstor.org/action/showPublication?journalCode=politicaltheory
- Political Science Quarterly-
  http://www.jstor.org/action/showPublication?journalCode=polisciequar
- Policy Sciences
  http://www.jstor.org/action/showPublication?journalCode=policysciences

Third Semester

POL 201 Indian Political System - I

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Constitution of India: Sources and Salient features, Philosophical Foundations, Preamble.

Unit 2 Fundamental Rights, Fundamental Duties and Directive Principles of state policy in India.

Unit 3 Union Executive: President, Prime Minister and Council of Ministers.

Unit 4 Union Legislature: Organization and functions of Lok Sabha and Rajya Sabha, Speaker of Lok Sabha, Relationship between Lok-Sabha and Rajya Sabha, Amendment Process of the Indian Constitution.

Unit 5 Union Judiciary: Composition and Jurisdiction of Supreme Court, Judicial Review and Judicial activism.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the Salient features of the Indian Constitution

- Comprehend the Rights and Duties of citizens

- Analyze the working of the Central Government of India.

Recommended Books:

1. Palmer, N.D. (1971). The *Indian Political System. Boston:* Houghton Mifilion.

2 Kothari, R. (1972). *Bharat Mein Rajniti*. New Delhi: Orient Longmans.

3 Hardgrave, J. R. (1970). *Indian government and politics in a developing Nation*. New York: Harcourt Brace and World, INC.

4 Siwach, J.R. (1985). *Dynamics of Indian Government and politics*. New Delhi: Sterling Publisher.

5 Pandey, R.K. & Chakrabarty, B. (2008). *Indian Government and politics*. New Delhi: Sage Publication.

6 Pylee, M.V. (1965). Constitutional Government in India. Mumbai: Asia Publishing House.

7   Kashyap, Subhas (2004). Bharat Ka Samvaidhanik Vikash Aur Rajniti. New Delhi: Jagriti Josh. (hindi)

8   Kothari, Rajani (2010). Bharat Mein Rajniti- KalaurAaj. New Delhi: Vsani Prakashan. (Hindi)

9   Singhvi, L.M.(1971). Indian Parties & Politics (in Hidni & English). Delhi: The Institute of Constitutional and Parliamentary Studies Research.

10 Jeanings, Sir Ivor (1953). Some Characteristics of the Indian Constitution. Indian branch: Oxford University Press.

11 Jones, Morries W.H. (1976). Parliament in India. USA: Greenwood Press.

12 Park, Rechard L & Tinker Irene (ed) (1959). Leadership and Political Institutions in India. New Jersey: Princeton University Press.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- Asian Journal of Social Science

  http://www.jstor.org/action/showPublication?journalCode=asiajso ciscie

- The Indian Journal of Political Science

  http://www.jstor.org/action/showPublication?journalCode=indijpol iscie

POL 205 Major Governments of the World

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 UK : Characteristics, Conventions, Queen and Crown; Organization and Powers of Parliament and Executive; Supreme Court : Organization and Powers.

Unit 2 U.S.A.: Characteristics, Federalism, Organization and Powers of Congress; President : Election and Powers; Supreme Court : Organization and Powers.

Unit 3 France: Evolution and Development of the French Constitution; Characteristics of the Vth Republic; Organization and Powers of Parliament, Executive: President and Prime Minister; Judiciary: Characteristics, Organization and Functions.

Unit 4   Switzerland: Characteristics, Federalism, Organization and Powers of Federal Assembly; Plural Executive and Direct Democracy.

Unit 5   China: Characteristics, National People's Congress, President and Party system.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the political system and process of the major countries of the world.

- Identify and distinguish between the functions of various political systems.

- Analyze the outputs of political systems.

Recommended Books:

1. Kapoor, A. C. & Mishra, K.K. (2010). *Selected Constitutions*. (Latest edition – Hindi & English. New Delhi: S. Chand & Company)

2. Goyal, O.P. (2007). *Comparative Governments*, New Delhi: Macmillan.

3. Neal, P.O. (2004). *Essentials of Comparative Politics*.

4. Bagehot, W. (1963). *The English Constitution*. London: Fontana.

5. I. Derbyshire, I. (1991). *Politics in China*. London: Chambers.

6. Finer, H. (1969). *Theory and Practice of Modern Government*. London: Methuen.

7. Laski, H.J. (1948). *American Democracy: A Commentary and An Interpretation*, London: Unwin.

8. Maddex, R. (2000). *Constitutions of the World,* 2ndedn., Washington DC and London: CQ Press.

9. Ogg, F. A. & Zink. (1964). *Modern Foreign Governments.* New York: Macmillan.

10. Tocqueville, A. de. (1886). *Democracy in America,* 2 Volumes, Bombay: Popular.

Suggested e-resources:

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- Presidential Studies Quarterly
  http://www.jstor.org/action/showPublication?journalCode=presstudq

- Review of International Studies
  http://www.jstor.org/action/showPublication?journalCode=revinterstud

- International Studies Quarterly
  http://www.jstor.org/action/showPublication?journalCode=intestudquar

Fourth Semester

POL 202 Indian Political System – II

Max. Marks : 100   L   T   P   C
(CA: 40 + ESA: 60)   4   0   0   4

Unit 1 Federal System in India – Characteristics, nature, emerging trends. Demand for state autonomy.

Unit 2 Union-State Relations - Legislative, Administrative, Financial Relations and need of reforms.

Unit 3 Office of the Governor, Chief Minister- Role, Powers and Functions.

Unit 4 Party system in India: Features and trends, Role of regional parties.

Electoral process, Determinants of electoral behavior and need of electoral reforms.

Unit 5 Problems of Indian Democracy: Regionalism, Language, Caste and Communalism.

Coalition government and Participation of women in Indian politics.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the basic structure of federal system
- Know about electoral process in India .
- Critically Analyze India's Democracy.

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Recommended Books:

1 Palmer, N.D. (1971). The *Indian Political System. Boston:* Houghton Mifilion.

2 Kothari, R. (1972). *Bharat Mein Rajniti*. New Delhi: Orient Longmans.

3 Hardgrave, J. R. (1970). *Indian government and politics in a developing Nation*. New York: Harcourt Brace and World, INC.

4 Siwach, J.R. (1985). *Dynamics of Indian Government and politics*. New Delhi: Sterling Publisher.

5 Pandey, R.K., Chakrabarty, B. (2008). *Indian Government and politics*. New Delhi: Sage Publication.

6 Austin, G. (1966*). The Indian Constitution: Corner Stone of a Nation*. Oxford: Oxford University Press.

7 Basu, D.D. (1994). *An Introduction to the Constitution of India.* New Delhi: Prentice Hall.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- Indian Journal of Asian Affairs
  http://www.jstor.org/action/showPublication?journalCode=indijasi aaffa

- The Indian Journal of Political Science
  http://www.jstor.org/action/showPublication?journalCode=indijpol iscie

POL 204 Major Governments of South Asia

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 **Pakistan:** Characteristics of the Political System. Role of Army and struggle for democracy in Pakistan, Federalism: Characteristics of the federal system.

Unit 2 **Pakistan:** Composition, Powers and functions of Executive: President and Prime minister. Judiciary.

Unit 3 **Bangladesh:** Characteristics of the Political System, Powers and functions of President (Executive), Composition and Powers of Legislature.

Unit 4 Sri Lanka: Characteristics of the Political System, Powers and Functions of the President, Composition and Powers of the Legislature, Role of Judiciary.

Unit 5 Nepal: Characteristics of the Political System, Genesis of Democratic Republic and end of Monarchy. Election and Powers of the President and Prime Minister. Composition and Powers of the Legislature, Emerging issues and Challenges.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the working of political systems of major countries of south Asia.

- Identify the issues and challenges of the political systems in south Asia.

- Analyze the working of political systems in south Asia.

Recommended Books:

1. Sayeed, K.B. (1967). *The Political System of Pakistan*. Boston: Houghton Muffin Co.

2. Wriggings, H. (2015). *Ceylon - Dilemmas of a New Nation. New York: Princeton University Press.*

3. Gupta, A. (1974). *Politics in Nepal*. New Delhi: Allied Publishers.

4. Johari, J. C. (1991). *Goverment and Politics of South Asia.* New Delhi*: Sterling Publisher.*

5. Mathur, P.C. (1985). *Governments and Politics of South Asia.* vol. II. Jaipur: Printwell Publisher.

6. Vorys, K. (1965). *Political Development in Pakistan. New Jeresy: Princeton University Press.*

7. Kodikara, S.U. (1965). *Indo - Ceylon Relations Since Independence.* Colombo: Ceylon Institute.

8. Rose, S. (1963). *Politics in Southern Asia.* Oxford: St. Martin Press.

9. Chadda, M. (2000). *Building democracy in South Asia : India, Nepal, Pakistan. Boulder Colorado:* Lynne Rienner.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- Pakistan Horizon
  http://www.jstor.org/action/showPublication?journalCode=pakistanhorizon
- Presidential Studies Quarterly
  http://www.jstor.org/action/showPublication?journalCode=presstudq
- Asian Affairs
  http://www.jstor.org/action/showPublication?journalCode=asianaffairs
- Asian Journal of Social Science
  http://www.jstor.org/action/showPublication?journalCode=asiajsociscie

Fifth Semester

POL 304 Western Political Thinkers

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Plato: Justice, Education, Communism, Ideal State and Rule of Philosopher.

Unit 2 Aristotle: State, Justice, Ideas on Family, Property and Slavery, Citizenship, Classification of Constitutions and Revolution.

Unit 3 Machiavelli: Child of his times, Human Nature, Religion and Morality, State, Father of Modern Political Thought.

Hobbes: Social Contract, Doctrine of Sovereignty and Individualism.

Unit 4 Locke: Social Contract, Government and Natural Rights, Liberalism.

Rousseau: Social Contract, General Will, Sovereignty and Comparative reflection on Hobbes, Locke and Rousseau's Social Contract Theory.

Unit 5 Marx: Dialectical and Historical Materialism, Surplus Value, Class Struggle and Marxian State.

Learning Outcomes: After completion of this course, the students will be able to:

- Comprehand the diverse intellectual political traditions in the west.
- Understand the conceptual debate of fundamental political ideas in the west.

- Critically analyze the political philosophy of western political thinkers.

Recommended Books:

1. Davidson, W.L. (1957). *Political Thought from Bentham to J. Mill*. Oxford: Oxford University Press.

2. Dunning, W.A (1902). *History of Political Theories Vol. I, II & III*, New York: Macmillan.

3. Jones, W.T. (1973). *Master of Political Thought*, Volume II. Chicago: The University of Chicago Press Journal.

4. Sabine, G.H. (1973). *A History of Political Theory*, 4th edn. Revised by T.L Thorson, New Delhi: Oxford University Press.

5. Allen, J.W. (1967*). A History of Political Thought in the Sixteenth Century*. London: Methuen.

6. Ashcraft, A. (1986). *Revolutionary Politics and Locke's Two Treatises of Government*. London: Allen and Unwin.

7. Chapman, J.W. (1956). *Rousseau- Totalitarian or Liberal*. New York: Columbia University Press.

8. Germino, D. (1972). *Modern Western Political Thought: Machiavelli to Marx*. Chicago: University of Chicago Press.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- The Western Political Quarterly
  http://www.jstor.org/action/showPublication?journalCode=westpoliquar

- Advocate of Peace through Justice
  http://www.jstor.org/action/showPublication?journalCode=advopeacjust

- The European Journal of Social Quality
  http://www.jstor.org/action/showPublication?journalCode=eurojsociqual

- Studies in East European Thought

- http://www.springerlink.com/openurl.asp?genre=journal&issn=0925-9392

Sixth Semester

POL 303 Major Political Ideologies

Max. Marks : 100
(CA: 40 + ESA: 60)

L	T	P	C
4	0	0	4

Unit 1 Idealism: Meaning, Definitions, Main principles, merits and demerits, Hegel and Green's thought on idealism.

Unit 2 Liberalism: Meaning, Definitions, Historical Evolution, Main principles, merits and demerits. Pluralism: Meaning, Definitions, Main principles, merits and demerits, Laski's view on Pluralism.

Unit 3 Utilitarianism: Meaning, Definitions, Main principles, merits and demerits, Bentham's Utilitarianism and Mill's revision of Bentham's Utilitarianism.

Unit 4 Socialism: Meaning, Definitions, Historical Evolution, Main principles, merits and demerits.

Nationalism: Meaning, Definitions, Main principles, merits and demerits

Unit 5 Feminism: Meaning, Definitions, Waves, issues and challenges.

Environmentalism: Meaning, Definitions, Development, issues and challenges.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the major political ideologies, their basic principles and relevance.
- Compare the diverse perspectives of political ideologies.
- Analyze the major political ideologies.

Recommended Books:

1. Ebenstein, W. (1958). *Today's isms.* Angelwood Clifs: N.J Prentice Hall.

2 Coker, F.W (1962). *Recent Political Thought. Appleton century crofts.*

3 Suda, J.P. *(2017). History of Modern Political Thought*, I to IV Volume. Meerut: Jai Prakash Narayan & Company.

4 Mahajan, V.D. (1990). *Recent Political Thought*. New Delhi: S. Chand & Co.

5   Laski, H.J. (1920). *Political Thought from Locke to Bentham*. Oxford: Oxford University Press.

6   Heywood, A. (1999). *Political Theory: An Introduction*. London: Macmillan.

7   Kateb, G. (1968). *Political Theory: Its Nature and Uses*. New York: St. Martin's Press.

8   Kuhn, T. (1970). *The Structure of Scientific Revolution*. Chicago: University of Chicago Press.

9   Kymlicka, W. (1990). *Contemporary Political Philosophy: An Introduction*. Oxford: The Clarendon Press.

10   Varma, S.P. (1983). *Modern Political Theory*. New Delhi: Vikas.

11   Gellner, E. (1983). *Nations and Nationalism*. Oxford: Blackwell.

12   Kymlicka, W. (1990). *Contemporary Political Philosophy: An Introduction*. Oxford: The Clarendon Press.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29
- Political Theory

  http://www.jstor.org/action/showPublication?journalCode=politicaltheory
- Socialism and Democracy-http://www.tandfonline.com/loi/csad20
- Theoria: A Journal of Social and Political Theory
- http://www.jstor.org/action/showPublication?journalCode=theoria

Discipline Electives

POL 302 International Relations since 1945

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1: International Relations: Meaning, Evolution and significance. Major approaches of International relations: Idealist, Realist and Systems.

Unit 2: UN: Objectives, Organization with special reference to General Assembly and Security Council; Achievements, Limitations and prospects of UN in 21st century.

Unit 3: Cold War: Stages- Detente, New Cold War, factors leading to Post Cold War Era, Uni-Polarity and Polycentrism.

Unit 4: International Political Economy: IMF, World Bank and WTO North South Dialogue, South-South cooperation.

Unit 5: Emerging Trends in Post Cold War Era: Human Rights, Gender, Conflict Resolution and Environment Protection.

Learning Outcomes: After completion of this course, the students will be able to:

- Analyze and explain contemporary international phenomena, including identifying and assessing the International Scenario.
- Identify important historical changes in International Relations.
- Recognize key aspects of International Organizations and processes.

Recommended Books:

1. Malhotra, V.K. (2008). *International Relations*, New Delhi: Anmol Publication.

2. Paimer & Perkins, (2001). *International Relations,* 3rd ed., Boston: CBS Publication.

3. Khanna, V.N. (2013). *International Relations*. New Delhi: S. Chand Company Ltd.

4. Wilkilson, P. (2007). *International Relations: A Very Short Introduction*, Oxford: Oxford University Press.

5. Bareth, R.S. & Gupta, D. (2010). *State and Globalization*. Jaipur: Rawat Publication.

6. Singh, S. & Mohenkumar, S. (2012). *Climate Change: An Asian Perspective.* Jaipur: Rawat Publication.

7. Poddar, G.D. (2009). *Globalization, Liberalization and Environmentalism.* Jaipur: Rawat Publication.

8. Joshi, S. J. (2005). *International Relations.* New Delhi*:* Krishna Prakashan.

9. Cranston, M. (1973). *What are Human Rights*? London: Bodley Head.

10. Couloumbis, A. A. & Wolf, J. H. (1989). *Introduction to International Relations: Power and Justice*. New York: Praegar.

11. Coplin, W. D. (1971). *Introduction to International Politics*, Chicago, Markham.

12. Dalton, R. & Kuechler, M. (1990). *Challenging the Political Order: New Social and Political Movements in Western Democracies*. Cambridge: Cambridge University Press.

13. Wattenberg, M. (2000). *Politics without Partisans: Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press.

14. Deutsch, K.W. (1989). *The Analysis of International Relations*, New Delhi, Prentice Hall.

15. Dougherty, J. E. (1962). *How to think about Arms Control and Disarmament*. New York: Macmillan.

Suggested E-Learning Resources:

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29

- India International Centre Quarterly, http://www.jstor.org/action/showPublication?journalCode=indiaintecentq, India International Centre

- Chronology of International Events and Documents, http://www.jstor.org/action/showPublication?journalCode=chrointevendoc, Royal Institute of International Affairs

- International Affairs Review Supplement http://www.jstor.org/action/showPublication?journalCode=inteaffarevisupp

- International Studies Quarterly http://www.jstor.org/action/showPublication?journalCode=intestudquar

- World Politics http://www.jstor.org/action/showPublication?journalCode=worldpolitics

- The Journal of International Relations http://www.jstor.org/action/showPublication?journalCode=jinterelations

POL 305 Decentralized Democracy in India

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Democracy in India: Dimensions, Features; Decentralized Democracy: Concept and Historical Development of Local Self Government

Unit 2 Rural Local Self Government: Organization, Structure, Power and Function of Zila Parishad, Panchayat Samiti, Gram Panchayat and Gram Sabha: With Special Reference to 73rd Constitution Amendment

Unit 3 Urban Local Self Government: Organization, Structure, Power and Function of Municipal Corporation and Municipal Council: With Special Reference to 74th Constitutional Amendment

Unit 4 Financial Recourses of Local Self Government, Control Over Local Government: Legislative, Administrative and Financial.

Unit 5 Trends in Decentralized Democracy in India: Women and Marginalized Section of Society, Good Governance, Good Governance Initiatives in India, E- Governance

Learning Outcomes: After completion of this course, the students will be able to:

- Comprehend the origin and development of Indian local self-government.
- Understand the Indian system of democratic decentralization, including rural and urban bodies.
- Analyze the working of local self-government in India.

Recommended Books*:*

1. Kohli, Atul. (2001). *The Success of India's Democracy*. Cambridge: Cambridge University Press.
2. Deva, Vasu. (2005). *E-Governance in India: A Reality,* New Delhi: Common wealth Publishers,
3. Sharma, Pankaj. (2004). *E-Governance: The New* Age *Governance*. APH Publishers,
4. Maheshwari, Sriram (1984). *Bharart me Sthaniye Sarkare*. Delhi: Oriental. (Hindi)
5. Rajini, Kothari. (1970). *Politics in India*. Delhi: Orient Longman.

6. Basu, Rumki. (ed). (2015). *Democracy and Good Governance*. *Reinventing the Publicservice* Delivery *Systemin India*. New Delhi: Bloomsbury India, 2015.

E- Resources:

- https://books.google.co.in/books/about/Local_Governance_in_India.html?id=2YkLfe-USCkC&redir_esc=y

- https://books.google.co.in/books/about/Local_Government_in_India.html?id=tb5PmSon1rsC&redir_esc=y
  https://books.google.co.in/books/about/Democratic_Politics_and_Governance_in_In.html?id=Q9Fj8e0CtIoC&redir_esc=y

- https://books.google.co.in/books/about/Party_Politics_and_Democratic_Governance.html?id=lwOXJyauLzIC&redir_esc=y

- https://books.google.co.in/books/about/The_Challenges_of_Governance_in_Indian_D.html?id=q_5A6Bm9gs0C&redir_esc=y

POL 301 India's Foreign Policy

		L	T	P	C
Max. Marks : 100		**4**	**0**	**0**	**4**
(CA: 40 + ESA: 60)					

Unit 1: Foreign Policy: Meaning, Approaches and Significance, India's Foreign Policy: Evolution, Features and Determinants, Continuity and Change in 21st Century

Unit 2: India's Foreign Relations with Major Powers Since 1991: USA, Russia and China

Unit 3: India's Relations with neighbors: Pakistan, Bangladesh, Sri Lanka and Nepal

Unit 4: India's Interaction with Global and Regional Institutions: UN, NAM, BRICS, SAARC and ASEAN

Unit 5: Contemporary Issues and Trends of India's Foreign Policy: Globalization, Neo-Colonialism, Terrorism and Climate Change

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the determinants and relevance of foreign Policy.
- Critically analyze India's bilateral relations with major powers and its neighbouring countries.
- Explore the various issues and challenges in international politics

Recommended Books:

1   Sharma, R.R. (2005). *India and Emerging Asia*, New Delhi: Sage.

2   Chellaney, Brahma. (1999). *Securing India's Future in the New Millennium*. New Delhi: Orient Longman.

3   Perkovitch, George. (2002). *India's Nuclear Bomb - The Impact of Global Proliferation*. New Delhi: OUP.

4   Cohen, S. P. (2001). *India: Emerging Power.* New Delhi: OUP.

5   Ghai, U.R. (2012). *Foreign Policy of India*. Jalandhar: New Academic Publishing.

6   Vinayak, Achin. (1995). *India in a Changing World: Problems, Limited and successes of its Foreign Policy*. New Delhi: Vikas publisher.

7   Gupta, K. (1958). *India in world Politics.* New Delhi: Sterling Publisher.

8   Mehrotra, S.R. (1965). *India and the Commonwealth. New York: F.A. Prager.*

9   Macridis, R.C. (1976). *Foreign Policies in World Politics. New Delhi:* Prentice-Hall.

Suggested e-resources-

- https://epgp.inflibnet.ac.in/ahl.php?csrno=29
- Review of Middle East Studies
  http://www.jstor.org/action/showPublication?journalCode=revimideaststud
- The Journal of International Relations
  http://www.jstor.org/action/showPublication?journalCode=jinterelations
- Foreign Policy
  http://www.jstor.org/action/showPublication?journalCode=foreignpolicy
- Foreign Affairs
  http://www.jstor.org/action/showPublication?journalCode=foreignaffairs

POL 306 Research Methodology in Political Science

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Research in Political Science : Meaning, Nature, Problems and emerging fields; Scientific Method.

Unit 2 Research Design : Meaning, objectives, Components and Types; Hypothesis : Meaning and types.

Unit 3 Sampling; Data: Meaning, types, difference between Primary and Secondary data, Sources of data collection.

Unit 4 Techniques of Data Collection: Questionnaire, Schedule and Interview

Unit 5 Data Processing and Analysis: Classification and Tabulation; Measures of central tendency : Mean, Median and Mode.

Learning Outcomes:

After completion of the course students will be able to:

- Understand the basics of political science research and develop aptitude for political science research.
- Identify various sources of primary and secondary data.
- Use and apply various methods and techniques of research.

Recommended Books:

1. Kothari, C. R. (2008). *Research Methodology- Methods and Technique.* New Delhi: Wiley and Eastern Limited.

2. Sellitz, et al. (2003). *Research Methods in Social Relations*. New York.

3. Goode, W. J. & Hatt, P. K. (1987). *Methods of Social Research.* New York: Free Press.

4. Babbie, E. R. (2005). *Survey Research Methods*. Belmont California: Wadsworth Publishing Company.

5. Sijoberg, G. & Nett, R. (2002). *A Methodology for Social Research*. Jaipur: Rawat Publication.

6. Rosenburg, K. (1990). *Statistics for Behavioural Sciences.* W. C. Brown Publishers.

7. Black, T. (2001). *Understanding Social Sciences Research*. New Delhi: Sage Publication.

8. वर्मा, एस. एल. (2017). *अनुसंधान प्रविधि.* जयपुरः राजस्थान हिन्दी ग्रन्थ अकादमी.

Suggested E-resources:

- Social Research Methods: Qualitative and Quantitative Approaches. Retrieved from

  http://letrunghieutvu.yolasite.com/resources/w-lawrence-neuman-social-research-methods_qualitative-and-quantitative-approaches-pearson-education-limited-2013.pdf

- Fundamental of Research Methodology and Statistics. Retrieved from

  http://cache3.pdfdrive.com/dl.php?id=10442087&h=e90bd 7771c3 cf9674c6672e678aea224&u=cache

- Research Methodology a step-by-step guide for beginners. Retrieved from

  http://www.sociology.kpi.ua/wp-content/uploads/ 2014/06/Ranjit_Kumar-Research_Methodology_A_Step-by-Step_ G.pdf

POL 308 Social Movements in India: Since Independence

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Social Movement: Concept, Elements, Characteristics and Types.

Unit 2 Theories of Social Movement, Emerging trends in study of Social Movements.

Unit 3 Social Movement in India: Concept, Elements, Background and Characteristics.

Unit 4 Social Movement in India: Movement of Deprived section, Tribal Movement, Dalit Movement, Women's Movement.

Unit 5 Social Movement in India: New Dimensions, Environment Movement, Human Rights Movement, Youth Movement.

Learning Outcomes:

After completion of the course students will be able to:

- Understand the concept and Nature of the Social Movements.
- Familiarize themselves with the Theories of social movement.
- Analyze the various Social Movements.

Recommended Books:

1. Reissued, 1995. Ghanshyam Shah (ed.)(2002). *Social Movements and the State*, New Delhi. Sage.

2. Gail Omvedt,(1993). *Reinventing Revolution, New Social Movements and the Socialist Tradition in India*, Sharpe.
3. James Petras,(2005). *The Centrality of Peasant Movements in Latin America: Achievements and Limitations Synthesis/Regeneration*, No.38, Fall .
4. Manoranjan Mohanty, Partha Nath Mukherji with Olle Tornquist (eds.)(1998). *People's Rights: Social Movements and the State in the Third World*, Sage.
5. Rajendra Vora and Suhas Palshikar (ed.),(2004).*Indian Democracy, Meanings and Practices*, Sage.
6. Ralph Miliband and John Saville eds.(1972). *The Socialist Register, 1972*, , London, The Merlin Press .
7. Shahnaz Rouse, (2004) *Shifting Body Politics, Gender, Nation, State in Pakistan, Women Unlimited*.
8. Tom Mertes (ed.),(2004). *A Movement of Movements, Is Another Really World Possible?*, , London: Verso.

Suggested E-resources:

- https://www.dailyo.in/variety/historic-protests-anna-hazare-narmada-bachao-andolan-medha-patkar-telangana-kashmir-jessica-lal-mandal-protests-afspa/story/1/7821.html
- http://ncert.nic.in/ncerts/l/lesy208.pdf
- http://www.arvindguptatoys.com/arvindgupta/movement-shah.pdf
- https://www.scribd.com/document/119348728/Social-Movements-After-Independence

POL 307 Political Obligation

Max. Marks : 100　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　**4　0　0　4**

Unit 1　Political Obligation: Meaning, Nature and Scope; Evolution and Development of the concept of the Political Obligation.

Unit 2　Political obligation and Right; Political Obligation and Duties; Dimension of political obligation.

Unit 3　Theories of Political Obligation - T.H.Green and D.H.Thoreau; Gandhian Principles.

Unit 4　Political Obligation and the Right to Dissent; Political Obligation and Revolution.

Unit 5　Role of state in balancing Political Obligation; Role of International Society in Political Obligation of the State.

Learning Outcomes:

After completion of the course students will be able to:

- Understand the concept and theories of political obligation.
- Familiarize themselves with role of state and international society in balancing political obligation
- Comprehend the various theories of political obligation.

Recommended Books:

1. Horton, J. (1992). *Political Obligation*. London, U.K.: Macmillan.
2. Gilbert, M. (2006). *A Theory of Political Obligation: membership, commitment and the bonds of society*. London, U.K.: Clarendon Press.
3. Raphael, D.D., and Green, T.H. (2008). *Political Obligation*.

Suggested E-resources:

- https:onlinelibrary.wiley.com/doi/full/10.1111/jopp.12125
- https://politics.virginia.edu/georgeklosko/wp-content/uploads/sites/8/2016/09/44.pdf
- https://academic.oup.com/pq/article/62/246/106/1516421
- https://www.jstor.org/stable/2380215?seq=1#metadata_info_tab_contents

Psychology

First Semester

PSY 101 Introduction to Psychological Processes

Max. Marks : 100 **L T P C**
(CA: 40 + ESA: 60) **6 0 0 6**

Learning Outcomes: After completion of this course, the students will be able to:

- Describe the scope and applications of psychology.
- Evaluate the basic psychological theories, approaches, principles, and concepts of general psychology.
- Apply psychological theories and principles to their own lives and experiences.
- Discuss and Integrate different perspectives to explain human behavior in everyday life.

Unit 1: Introduction

Definition, Nature, Scope and applications of Psychology. Approaches of psychology: Biological, Psychological, Psychodynamic, Behavioural, Cognitive, Humanistic and Evolutionary approach, Social, Cultural and Multi Cultural perspective. Methods of psychology: Experimental, Observation, Interview, Questionnaire, Case Study, Survey, and Meta analysis.

Unit 2: Attention and Perception

Attention and Perception– Selectivity of Attention, Determinates of Attention and Perception, Organizing Principles of Perception, Form and Depth Perception.

Unit 3: Learning, Remembering and Forgetting

Basic processes of Classical and Operant conditioning - Acquisition, Extinction, Spontaneous recovery, Generalization and Discrimination.Trial and Error method of Learning, Cognitive learning, Observational Learning, Laws and Curves of learning, Transfer of Training. Verbal Learning and Memory: Encoding, Storage and Retrieval processes Short term and Long term Memory, Mnemonic Methods of Retention. Motivation and Learning, Causes of forgetting: Decay, Interference, Retrieval failure, Motivated Forgetting and Amnesia.

Unit 4: Thinking Motivation and Emotion

Concept formation, Problem solving, Creativity, Inductive and Deductive Reasoning.

Indicators of Motivated Behaviour, Nature and Classification of Motives – Biogenic and Psycho-sociogenic motives, Intrinsic and Extrinsic Motivation, Conflict and Frustration.

Techniques of Assessment of Motivation, Maslow's Need Hierarchy and other theories of Motivation. Emotion: Nature and Development of Emotion, Expression and Control of Emotions. Theories of Emotion, Culture and Emotion, Polygraphic techniques.

Unit 5: Intelligence and Personality

Intelligence- Nature, Measurement and Theories of Intelligence. Genetic/Biological and Environmental influences, Cross-Cultural issues in Intelligence.

Personality: Meaning and Nature, Trait and Type theories of Personality and Psycho-analytical theory by Freud. Biological and Socio-Cultural Determinants of Personality.Assessment of Personality.

Recommended Books:

1. Atkinson, R.L., Atkinson, R.C. & Hilgard, E.R. (2005). *Introduction to Psychology*, (10th ed.), New York: Harcourt Brace Jovanovich.

2. Baron, R.A. (2007). *Psychology*. New Delhi: Pearson Education.

3. Cohen, R.J. (1994). *Psychology and Adjustment*. Allyn & Bacon.

4. Hockenbury, D. H. & Hockenbury, S.E. (2002). *Psychology* 3rd Edition New York, Worth Publisher.

5. Morgan, C. T. & King, R. A. (2005). *Introduction to Psychology*. Delhi: Tata McGraw Hill.

6. Singh, A. K. (1997). *Uchchtar Samanya Manovigyan*. Varanasi: Motilal Banarsi Das.

7. Weiten, W. & Margaret, A.L. (2007). *Psychology Applied to Modern Life*. Thompson Woods worth.

8. Zimbardo, P.G. & Weber, A.L. (1997). *Psychology*. New York: Harper Collins College Publishers.

Suggested e-learning material:
1. **Introduction to Psychology**
   http://dept.clcillinois.edu/psy/IntroductionToPsychologyText.pdf
2. **Psychology**
   https://d3bxy9euw4e147.cloudfront.net/oscms-
   prodcms/media/documents/Psychology-OP_cNrqlqM.pdf
3. **Psychology today** https://www.psychologytoday.com/intl
4. **Simply Psychology** https://www.simplypsychology.org/

PSY 101L Introduction to Psychological Processes Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After completion of this course, the students will be able to:

- Articulate ethical views of research.
- Describe the process and steps of psychological testing.
- Demonstrate the use of various psychological tests in terms of memory and learning.
- Critically assess the relevance of psychological tests in demonstrating different phenomenas.

1. Facilitating understanding of self:
   (i) Maintain a Personal Diary and describing personal experiences
   (ii) Use of psychological tools to learn about themselves and to enhance self-awareness (eg- Johari Window, SWOT Analysis, Psychological tests).

2. Replication of various psychological phenomena (**Any Three**)
   (i) Learning curve
   (ii) Chunking
   (iii) Serial Position Effect
   (iv) Transfer of Training (Bilateral)

3. Familiarization with and use of psychological instruments (**Any Three**)
   (i) Verbal Test
   (ii) Non-Verbal Test
   (iii) Performance Test
   (iv) Non-Verbal Performance Test

Second Semester

PSY 102 Social Psychology

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: After completion of this course, the students will be able to:

- Explain the major theories, concepts, empirical findings, methods and techniques used in social psychology.
- Evaluate major theories, concepts, perspectives, and empirical findings in social psychology to explain human behavior.
- Explain group dynamics and attitude formation in term of human behavior.
- Discuss how individual differences influence beliefs, values, and interactions with others.

Unit 1: Introduction

Nature, Goals and Scope of Social Psychology; Social Psychology and its relation with other sciences, Methods of Study in Social Psychology– Experimental Methods, Non-Experimental methods, Correlation approach & Cross-Cultural research.

Unit 2: Social Perception and Cognition

Perceiving Ourselves: Self-Concept, Self-Esteem, Self-Presentation, and Self-expression.

Perceiving others – Forming Impressions, Verbal and Non-verbal cues, Central traits, Models of information integration, Primacy & Recency effects, Prejudices-nature and Components, Acquisition and Reduction of Prejudices. Stereotypes, Attribution of Causality – Theories and Biases.

Unit 3 Leadership

Leadership- Definition, Types and Functions. Trait, Situational and Inter-actional approaches to Leadership, Leadership Effectiveness. Interpersonal Attraction and its determinants. Theories of Interpersonal attraction (Heider's Balance Theory, Social Exchange Theory and Cognitive Dissonance Theory).

Unit 4: Group and Attitudes

Group structure and Functions, Task performance and Social facilitation and Loafing, De-Individuation and Conformity, Obedience and Social Modelling. Norms and Decision-making.

Nature and Functions of Attitude, Measurement of Attitudes, Attitude and behaviour, Theories of reasoned and planned behaviour, Formation and Change of attitude (Balance and Cognitive Dissonance theories).

Unit 5: Pro-Social Behaviour and Aggression

Pro-social behaviour- Theoretical explanation, Co-operation and Helping behaviour, Personal, Situational and Socio-cultural determinants, Bystander effects. Aggression- Theoretical Perspective, Trait, Situational and Social Learning approaches, Personal and social Determinants of Aggression, Control and Prevention of Aggression.

Recommended Books:

1. Alcock, J. E., Carment, D.W., Sadava, S. W., Collins, J. E. & Green, J. M. (1997). *A textbook of social psychology*. Scarborough, Ontario: Prentice Hall/Allyn & Bacon.

2. Baron, R. A. & Byrne, D. (1998). *Social Psychology*. New Delhi: Prentice Hall.

3. Feldman, R. S. (1985). *Social Psychology: Theories, research and application*. New York: McGraw Hill.

4. Hogg, M. A. & Vaughan, G. M. (2002). *Social Psychology* (3rd ed). New York. Prentice Hall.

5. Lindgren (1974). *Introduction to Social Psychology*.Willey, New Delhi.

6. Mishra, G. (1990). *Applied Social Psychology in India*. Sage, New Delhi.

7. Myers D. G. (2006). *Social Psychology.* Tata Mcgraw-Hill, New Delhi.

8. Paliwal, S. (2002). *Social Psychology*. RBSA publishers, Jaipur.

9. Semin, G. R. & Fiedler, K. (1996). *AppliedSocial Psychology*. London: Sage.

Suggested e-learning material:

1. **Social Psychology**

   https://fpsiuht2012.files.wordpress.com/2013/10/social-psychology-baron.pdf

2. **Social Psychology**

   https://epdf.tips/download/social-psychology-10th-edition.html

3. **Psychology as a Social Science**

   https://open.umn.edu/opentextbooks/textbooks/psychology-as-a-social-science

4. **Journal of Applied Social Psychology**

   https://onlinelibrary.wiley.com/loi/15591816

PSY 102L   Social Psychology Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After completion of this course, the students will be able to:

- Develop recognizing of social psychology of group life and the cognitive, attitudinal and behavioural consequences of social psychology of group life including interdependence and categorization.

- Demonstrate how social identity and self-categorization process affect the pattern and progression of group life.

- Explain empirically attitude measurement and also formation of socio-metric matrix and sociogram to issues of social psychology.

- Manifest the assessment of leadership and examine the interactive influence of different leadership styles and group productivity norms.

1. **Understanding others through development of Observation skills**: Observe TV programme for some themes (e.g. image of child/woman) and write a report.

2. **Analysis of psychologically relevant literary text**

   Read literary / creative writing – Novel / Story / Book / Poem/Newspaper. Identify and Analyse psychological substance in it (mood, emotion, anxiety, conflicts, stresses.) and write a report.

3. **Analysis of a Film for a specific theme and write a report**.

4. **Attitude Measurement (Bogardus Social Distance scale)**.

5. **Formation of Socio-metric Matrix and Sociogram on some social issue**.

6.   **Leadership Assessment**.

Third Semester

PSY 205 Statistics and Research Methodology in Psychology

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	6	0	0	6

 Learning Outcomes: After completion of this course, the students will be able to:

- Explain the role of basic statistics technique in analysis of the data.
- Discuss the signification of hypothesis testing in psychological research.
- Explain the process of representing psychological data and its issues.
- Evaluate ethical issues associated to research process.

Unit 1: Measurement and its levels, nature of psychological data and score, graphical representation of the data using frequency polygon, ogive, cumulative frequency curve, histogram and bar graph methods, scope and utility of statistics in psychological research.

Unit 2: Concepts and laws of probability distribution, characteristics of normal probability curve, skewness and kurtosis, application of normal probability curve in research. Measures of central tendency, computation of Mean using long method for grouped & ungrouped data, computation of median using long method for grouped & ungrouped data and computation of mode using long method for grouped & ungrouped data. Measures of variability: Computation of range, average deviation, quartile deviation and standard deviation using long method for grouped & ungrouped data.

Unit 3: Hypothesis testing, nature and types of hypothesis, type I and type II error, degree of freedom, standard error of mean, one tailed and two tailed test, level of significance. Conceptualization of sample, sample size, determination of sample size. Concept of t test and computation for large and small samples, interpretation of results,

concept of chi square test and computation for large and small samples, interpretation of results.

Unit 4: Concept of correlation techniques, Pearson and spearman correlation techniques, computation of Pearson correlation method and spearman method concept of biserial and point biserial correlation techniques, nature of social sciences research, types and characteristics, criteria's of scientific method in psychology researches. Research problems and nature, sources of identifying research problem.

Unit 5: Introduction of research design, concept & characteristics of experimental design, factorial design, sampling techniques and its types, principles of test construction, validity and its types, reliability and its types, norms and standardization of the test.

Recommended Books:

1. Anastasi, A. & Urbina, S. (1997). *Psychological Testing*. NJ: Prentice Hall.

2. Ciminero, A. R. (1986). *Handbook of behavioral assessment* (Eds.). New York: John Wiley.

3. Dillon, R. F. (Ed.) (1997). *Handbook on Testing*, U.S.A.: Greenwood Press.

4. Freeman, F.S. (2008). *Theory and practice of psychological testing*. New Delhi: Oxford & IBH.

5. Garrett, H. E. (2005). *Statistics in Psychology and Education* (11th Ed.). Delhi: Paragon International Publishers

6. Guilford, J. P. & Fruchter. (1973). *Fundamentals of Statistics in Psychology and Education*. Tokyo: Kogakusha.

7. Kapil, H. K. (1980). *Sankhyaki Ke Mool Tatwa*. Agra: Vinod PustakMandir.

8. Kerlinger, F. N. (2008). *Foundations of behavioural research*. New Delhi: Surjeet Publications.

9. Kulkarni, S. S. & Puhan, B.N. (1988). *Psychological assessment*. In J. Pandey (ed.). Psychology in India: The state-of-the-Art, Vol. I. New Delhi: Sage.

10. Minium, E. W., King, B. M. & Bear, G. (1993). *Statistical reasoning in psychology and education*. New York: John Wiley.

11. Neuman, W. L. (1991). *Social research methods: Qualitative and quantitative*. Boston: Allyn& Bacon.

12. Nunnally, I. C. (1994). *Psychometric theory*. NY: McGraw Hill.

13. Puhan, B. N. (1982). *Issues in Psychological Testing*. Agra: National Psychological Corporation.

14. Salking, N. J. (1997). *Exploring Research*. NJ: Prentice Hall.

15. Siegel, S. (1994). *Non parametric statistics*. New York: McGraw Hill.

16. Whitley, Jr., B. E. (1997). *Principles of Research in Behavioral Science*. London & Toronto: Mayfield.

Suggested e-learning material:

1. **Research Design: quantitative, qualitative and mixed methods**

   https://www.pdfdrive.com/research-design-qualitative-quantitative-and-mixed-methods-e14218579.html

2. **Research Methods and statistics**

   https://www.pdfdrive.com/research-methods-and-statistics-e20154756.html

3. **Statistical methods for psychology**

   https://www.pdfdrive.com/statistical-methods-for-psychology-e32280668.html

PSY 205L Statistics and Research Methodology in Psychology Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After completion of this course, the students will be able to:

• Explain the concepts and uses of various statistical techniques.

• Discuss and demonstrate the utility of various psychological tests in terms of personality and intelligence.

• Relate and restate theoretical concepts to a real-world problem in a written report in terms of a statistical model or algorithm.

• Make appropriate use of statistical software to communicate the analysis accurately and effectively.

1. **Test Construction:**

   Develop a test of at least 30 items in a suitable area, using following steps

   1. Item selection

   2. Population Selection

   3. Sampling techniques to administer the test (sample of minimum 50).

4. Item analysis (Preliminary level) and Finalization of the test.

5. Determine Reliability and Validity.

6. Development of Software Package (working).

7. Writing a report on the test construction.

2. **Critical analysis of a published research:**

Review an article from a journal for methodology by taking into consideration:

• Purpose and plan of research.

• The variable studied in the research.

• Sampling procedures used in the research.

• Instruments used / constructed to measure the variable.

• Statistical analysis done.

• Result obtained.

Fourth Semester

PSY 201   Developmental Psychology

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After completion of this course, the students will be able to:

• Distinguish between major theoretical perspectives in developmental psychology.

• Explain the respective contributions of "nature" and "nurture" to human development.

• Identify the major issues and developmental task of human development.

• Demonstrate knowledge of research method and finding related to development throughout the life span**.**

Unit 1: Introduction- Concept and Meaning of Development. Determinants of Development: Biological and Socio-Cultural. Methodological Approach- Longitudinal and Cross-Sectional. Methods of Study- Experimental, Observational, Case Study, Interview and Psychological Testing.

Unit 2: Theories of Human Development- Freud's Psychoanalytic Theory, and Erikson's Theory of Psychosocial Development. Learning

Theories: Watson and Skinner. Bandura's Social Cognitive Theory. Piaget's Cognitive Development Theory. The Information Processing Theory.

Unit 3: Prenatal Development- Stages and Factors Affecting Prenatal Development. The Neonate: Physical Characteristics, Reflexes, Sensory and Motor Capacities. Development during Infancy- Physical Growth and Motor Development, Perceptual, Language, Emotional and Social Development.

Unit 4: Development during Childhood- Cognitive, Moral and Emotional Development. Puberty and Adolescence- Physical, Emotional and Social Development, Sex role Adjustment.

Unit 5: Adulthood- Vocational Adjustment, Adjustment to Careers, Marriage and Family. Old Age- Physical, Physiological, Psychological and Social changes. Adjustment Problems and Specific issues.

Recommended Books:

1. Bee, H. L. (1996). The Journey of Adulthood (3rd ed.). Prentice Hall, New Jersey.

2. Berk, L. E. (2007). Development through the Lifespan (3rd ed.). Dorling Kindersely (India) Pvt. Ltd.

3. Brodzinsky, D. M., Gormly, A. V. & Anibron, S. R. (1986). Life-Span Human Development. New Delhi: CBS Publisher.

4. Damon, W. (1997). Handbook of Child Psychology. N.Y: John Wiley.

5. Papalia, D. E, Olds, S.W. & Fieldman, R.D (2004). Human Development, 9th ed. Tata McGraw Hill, New Delhi.

6. Santrock, J. W. (2008). Lifespan Development. NY: McGraw Hill.

7. Shaffer, D. R. (2008). Developmental Psychology, 6th ed. California: Brooks & Cole.

8. Wolman, B. (1995). Handbook of Developmental Psychology. New Jersey, Prentice Hall.

Suggested e-learning material:

1. **Developmental Psychology**
   http://elibrary.bsu.az/books_163/N_44.pdf

2. **The Oxford Handbook of Developmental Psychology, Vol. 1**

http://ilabs.washington.edu/meltzoff/pdf/13Meltzoff_Williamson_
Handbook_Chapter.pdf

3. **Child Development**

http://krishikosh.egranth.ac.in/bitstream/1/2027544/1/HS1857.pdf

4. **Handbook of Psychology**

http://public.sxdtdx.edu.cn/jpkc/ggxlx1/news/%E5%BF%83%E7
%90%86%E5%AD%A6%E5%9B%BE%E4%B9%A6%E5%BA
%93/Wiley%20(2003)%E5%BF%83%E7%90%86%E5%AD%A6
%E6%89%8B%E5%86%8C-
%E5%8F%91%E5%B1%95%E5%BF%83%E7%90%86%E5%A
D%A6.pdf

PSY 201L   Developmental Psychology Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After completion of this course, the students will be able to:

- Demonstrate determining of major developmental milestones in human cognitive, perceptual, social emotional and language development.
- Exhibit a scientific attitude in critically thinking about, and learning about, behavior creativity and programmatic problem solving.
- Collaborate effectively, demonstrating an ability to work with groups and to complete case study projects with reasonable time frames in an ethical manner.
- Write effectively the reports including short summary, paper, report sections, proposals for various purposes.

1. **Practice at least six tests from the following tests**
    (i)   Assessment of Cognitive Development- Piaget
    (ii) Assessment of Moral Development by Kohlberg's Moral Development
    (iii) Assessment of Attachment Styles
    (iv) Assessment of Intelligence: WISC for primary children
    (v)   Draw-A-Man-Test

(vi)   High School Personality Questionnaire (HSPQ)

(vii)   Social Maturity Scale

(viii) Parenting Style

(ix)   Adjustment/Life Satisfaction among Elderly

(x)   Hauffman-Kasanin Test of Concept Formation

(xi)   Assessment of the Life skills

(xii)   Any other Test in consultation with the teacher

2. Conduct a case Study on some issue of relevance (Childhood Problems, Adolescent Problems Gifted child, Guilt, failure, Alcoholism, Drug Addiction etc.)

Semester V/Semester VI

Discipline Electives

PSY 304 Abnormal Psychology

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After completion of this course, the students will be able to:

- Discuss the recent conceptualization of abnormality and psychological disorders as per DSM –V approach.
- Explain recent developments in the area of diagnostic and treatment approaches.
- Explain the relevance of DSM-V approach in dealing with psychological and neurological disorders.
- Discuss research design and its types.

Unit-1 Introduction of Abnormal Psychology, Abnormal Behavior: Meaning, Incidence. Classification of Mental disorder: Need, Disadvantages, DSM-V, ICD-11.

Historical and contemporary views of abnormal behavior.

Unit-2 Models of Abnormal Behavior: Biogenic, Psychoanalytic, Humanistic and existential, Behavioral, Cognitive, Family systems, Psychosocial causal factors.

Clinical Assessment: Basic Elements, Physical and Psychosocial Assessment; Ethical issues in assessment.

Unit-3 **(Symptoms, Etiology and Treatment of the disorders)**

Anxiety Disorders: Generalized Anxiety Disorder, Separation Anxiety Disorder, Selective Mutism, Specific Phobia, Social Anxiety Disorder, Panic Disorder, Agoraphobia, Substance/Medication-Induced Anxiety Disorder.

Obsessive-Compulsive Disorders.

Unit-4 **(Symptoms, Etiology and Treatment of the disorders)**

Unipolar Depressive Disorders and Bipolar Mode Disorders.

Schizophrenia and other Psychotic Disorders (Schizophreniform Disorder, Delusional Disorder, Brief Psychotic Disorder and Shared Psychotic Disorder).

Unit-5 **(Symptoms, Etiology and Treatment of the disorders)**

Somatoform Disorders: Hypochondriasis, Somatization Disorder, Pain Disorder, Conversion Disorder.

Disorder of Childhood: Attention – Deficit/ Hyperactivity Disorder, Autism, and Intellectual Disability (Intellectual Developmental Disorder).

Recommended Books:

1. Buss, A. H. (1999). Psychopathology. New York John Wiley.

2. Carson, R. C., Butcher, J. N., Mineka, S. & Hooley, J. M. (2015). *Abnormal Psychology* (16th ed.). Pearson, New Delhi.

3. Carson, R. C., Butcher, J. N., Mineka, S. & Hooley, J. M. (2006). *Abnormal Psychology* (13th ed.). Dorling Kindersley Pvt. Ltd.

4. Diagnostic Statistical Manual for Mental Disorders. (2013). *American Psychiatric Publishing*.

5. Korchin, S. J. (2004). *Modern Clinical Psychology*, Tokoyo. Harper International Edition.

6. Lamm, A. (1997). *Introduction to Psychopathology*. New York. Sage.

7. Sarason, I. G. & Sarason, B. R. (2006). Ab*normal Psychology: The problem of Maladaptive Behavior*. XI Edition, Prentice Hall of India.

Suggested e-learning material:

1. **DSM-5**

https://psychiatryonline.org/pb-assets/dsm/update/DSM5Update2015.pdf

2. **Child Psychopathology**

    https://www.pdfdrive.com/essentials-of-child-psychopathology-linda-wilmshurst-e12024626.html

3. **Abnormal Psychology**

    https://www.pdfdrive.com/abnormal-psychology-e27099525.html

4. **Clinical Psychology**

    https://www.pdfdrive.com/clinical-psychology-e19366899.html

PSY 304L Abnormal Psychology Lab

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**0**	**0**	**4**	**2**

Learning Outcomes: After completion of this course, the students will be able to:

- Assess various types of psychopathology through various tests objectively.

- Demonstrate various personality and self- inventories.

- Analyze information and ideas from multiple sources regarding personality.

- Explain neurosis by applying various psychological tests.

Practice any six tests from the following tests:

1. Beck Anxiety Inventory.

2. Beck Depression Inventory.

3. Bells Adjustment Inventory.

4. CMI Health Questionnaire.

5. Fear Personal Stress Source Inventory.

6. Kohen (Perceived Stress Scale).

7. Mental Health Inventory.

8. Neurosis Measure/ NSQ.

9. Self-Rating Anxiety Scale.

PSY 305 Experimental Psychology

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After completion of this course, the students will be able to:

- Demonstrate knowledge of experimental psychology in understanding psychological process empirically.
- Implicate the principles of psychophysics in sensation and perception theoretically.
- Formulate scientific knowledge as out memory learning and other psychological process.
- Apply the fundamental concepts of empirical researches.

Unit 1: Definition and Nature of experimental Psychology, Contribution of Weber, Fechner, and William Wundt in origin of experimental psychology.

Unit 2: Concept of sensation and perception, Difference between sensation and perception, types of sensory process, empirical studies of visual and auditory sensory process.

Unit 3: Definition and characteristics of learning, types of learning: classical, operant, and verbal learning, empirical studies of verbal learning.

Unit 4: Ebbhinghaus contributions to memory, stage model of memory, empirical studies on sensory memory, short term memory and long term memory.

Unit 5: Concept and nature of psychophysics, methods of detection, signal detection theory, and subliminal perception.

Recommended Books:

1. Anderson, D. C. & Borkowski, J. G. (1978). Experimental Psychology: Research Tactics and their Application. Illinois: Scott foreman.
2. Chance, P. (1988). Learning and Behaviour. California: Wadsworth.
3. D'Amato, M. R. (1970). Experimental Psychology: Methodology, Psychophysics, and Learning.
4. Domjan, M. (2003). The Principles of Learning and Behaviour, California: Wadsworth / Thomson.

5. Flaherty, C. F., Hamilton, L. W., Gandelman, R. J. & Spear, N. E. (1977). Learning and Memory. Chicago: Rand McNally.

6. Goldstein, E. R. (2007). Psychology of Sensation and Perception. New Delhi: Cengage Learning.

Suggested e-learning material:

1. https://www.pdfdrive.com/handbook-of-psychology-volume-4-experimental-psychology-e19231511.html

2. https://www.pdfdrive.com/stevens-handbook-of-experimental-psychology-methodology-in-experimental-psychology-e159829118.html

3. https://www.pdfdrive.com/handbook-of-psychology-experimental-psychology-e158502968.html

PSY 305L Experimental Psychology Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes:

After completion of the course the students will be able to:

*   Analyze the major theoretical perspectives in the primary substantive sub-disciplines of experimental psychology.
*   Demonstrate proficiency in writing experimental summaries and findings.
*   Understand how psychologists study human behavior and mind.
*   Develop the understanding of research procedure and systematic steps in conducting experiments.

Practice any six tests from the following tests:

1. Divided Attention(Auditory Distraction)
2. Span of Attention (Zeigarnik Effect)
3. Illusion(Muller Lyer Illusion)
4. Bilateral Transfer
5. Serial Learning
6. Recall and Recognition
7. Method of Limits - R.L. or D.L. (determination of DL for weight lifting)

8. Method of Average Error: PSE and CE (Muller Lyer Illusion)
9. Retinal Color Zones (Ishihara color-blindness test)
10. Weber's Two point Threshold

PSY 302   Physiological Psychology

Max. Marks : 100   L   T   P   C
(CA: 40 + ESA: 60)   6   0   0   6

Learning Outcomes:

After completion of the course the students will be able to:

- Explain physiological mechanism of the brain and nervous system.
- Analyze the different methods of genetic, pharmacological and physiological studies.
- Describe the nerve impulse and biological basis of behavior.
- Explain the neural and physiological mechanism of sleep and waking, hunger and thirst.

Unit 1: Structure of Neuron, Nervous System- Classification, and Function. Central Nervous System and Autonomic nervous system-Peripheral Nervous System and Somatic Nervous System. Endocrine System- Pituitary, Adrenal, Thyroid, Parathyroid, Pancreas, Gonads, Pineal, and Thymus.

Unit 2: Methods of Physiological Psychology- Electrical Stimulation, Lesions and Types, Anatomical, Chemical, Electrical Recording (EEG, MEG, MSI) and Scanning Methods (CAT, MRI, PET, SQUID), TMS, Muscle Tension, Eye Movement, Skin Conductance, Cardiovascular activity, Stereotaxic surgery, Invasive Electrophysiological Recording Methods, Pharmacological Research Methods and Genetic Engineering.

Unit 3: Biological Bases of Behavior - Neurotransmitters- Definition and Types (Neuropeptides, Amino Acids, Monoamines, Acetylcholine, Proteins, and Soluble Gas). Nerve Impulse-Origin, Conduction, Transmission (synaptic).

Unit 4: Sleep and Waking- Kleitman's Evolutionary Theory of Sleep & Wakefulness, Types of Sleep, Stages of Sleep, Disorders of Sleep, Neural Mechanism of Sleep and Waking.

Unit 5: Ingestive behavior- Physiological and Neural Mechanism of Hunger and Thirst. Physiological and neural mechanism of emotions.

Recommended Books:

1. Bloom, F. L. & Lageeon, A. (1996). Brain, Mind and Behavior: New York: Freeman & Co.

2. Brodal, P. (1992). The Central Nervous System: Structure and function. New York: Oxford University Press.

3. Carlson, N. R. (2000). Physiology of Behavior. Boston: Allyn & Bacon.

4. Ganang, W. F. (2000). Review of medical Physiology. Norwalk, C.T.: Appleton & Lange.

5. Kalat, J.W. (2001). Biological Psychology. CA: Wadsworth.

6. Kolb, B, & Winshaw, I.Q. (2008). Fundamentals of Human Neuro-psychology. New York: W. H. Fleeman& Co.

7. Leukel, F. (2002). Introduction to Physiological Psychology [3rd edition]. New Delhi: CBS Publishers & Distributors.

8. Levinthal, C. F. (1996). Introduction to Physiological Psychology, 3rd ed. Prentice Hall.

9. Pinel, J. P. J. (2007). Biopsychology. Pearson Education.

10. Teubel, F. (2002). Introduction to Physiological Psychology [3rd Ed.]. New Delhi: CBS Publishers & Distributors

Suggested e-learning material:

1. **Understanding Biological Psychology**

    http://www.philipcorr.net/uploads/downloads/105.pdf

2. **Textbook of Medical Physiology**

    http://jpkc.hactcm.edu.cn/2012yxslx/file/Textbook%20of%20Medical%20Physiology.pdf

3. **Human Physiology**

    http://web.mef.hr/web/images/pdf/human_physiology.pdf

PSY 302L   Physiological Psychology Lab

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   4   2**

Learning Outcomes: After completion of this course, the students will be able to:

- Analyze and synthesize practical information regarding physiological process.
- Explain the mechanism of neuro imaging devices.
- Demonstrate report writing activity through different approaches in terms of primary and secondary data.
- Demonstrate Ravens Standard, Advanced and Coloured Progressive Matrices.

1. (a) Get familiar with some of the Bio- psychological tests and instruments and methods of investigation seeking collaboration with some medical institution (Visit some Medical College, hospital etc. and witness some demonstrations of these tests.). Write descriptions of any five instruments, methods and tests in the file (e.g.Contrast X Rays, CT, MRI, PET, MEG, EEG, TMS, EMG, EOG, SCR) Biofeedback.

2. **Raven's Standard, Advanced and Coloured Progressive Matrices or any other test in consultation with teacher.**

3. **Short Projects**
   (i) Take up a short project (individually or jointly) on the issue of your interest under the supervision of the teacher.
   (ii) Follow a methodological approaches (experimental / survey / observation / use of secondary data).
   (iii) Write a report.

Note: Teacher could evolve some method of evaluation e.g. teacher could ask each students to present (15-20 minutes) their Project Report and Internal assessment of the Project could be done by different faculty members of the department collectively as a part of evaluation. Extensive viva could be conducted by the external examiner to evaluate the project.

PSY 306 Introduction to Clinical Psychology

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: After completion of this course, the students will be able to:

- Identify how psychologists study human behavior and how this knowledge can be used to explain, predict, and influence behavior.
- Identify and critically evaluate psychological research methods.
- Explain various methods for collecting information from the client.
- Perform personality assessment by using various methods and approaches.

Unit 1: Clinical Psychology: Historical development, Nature and Scope, Work setting of clinical psychologist. Psychological Models: Psychoanalytical, Humanism, Behavioral

Unit 2: Diagnostic Assessment and Clinical tools: Interview, case study, behavioral assessment and psychological Tests.

Unit 3: Clinical Application of Psychological Tests: Tests of Intelligence-Stanford-Binet (iv ed). WAIS (3rd Ed.), Personality Tests: MMPI2, NEO-FFI,TAT and Rorschach.

Unit 4: Nature and Rationale of Therapies: Systematic desensitization, aversion, modeling, rational emotive therapies.

Unit 5: Clinical Health Psychology: Concept, models of illness and health (Biomedical, Bio-psycho-social), Behavior and health, Illness (Diabetes mellitus, Headache, Cancer).

Recommended Books:

1. Corey, G. (2009). Theory and practice of counselling and psychotherapy. Belmont, C.A.: Brooks / Cole.
2. Goldenberg, H. (1983). Contemporary clinical psychology (2nd Ed.) New York: Brooks / Cole.
3. Neitzel, M. T., Bernstein, D. A. & Millich, R. (1998). Introduction to clinical psychology, (5th Ed.). Upper Saddle River NJ: Prentice Hall.
4. Prohesska, J. O. & Norcross, J. C. (2010). Systems of Psychotherapy A t ranstheoratical analysis. USA: Brooks / Cole.
5. Singh, A. K. (2004). Naidanikmanovigyan. Varanasi: Motilal Banarsasi Das.

6. Hecker, J. E. & Thorpe, G. L. (2007). Introduction to Clinical Psychology: Science, Practice & Ethics. Dorling Kindersley Pvt. Ltd.

Suggested e-learning material:

1. **Contemporary Clinical Psychology**

    http://www.al-edu.com/wp-content/uploads/2014/05/Plante-Contemporary-Clinical- Psychology.pdf

2. **The Technique of Psychotherapy**

    https://www.israpsych.org/books/wp-content/uploads/2015/05/technique_of_psychotherapy.pdf

3. **Living With Chronic Depression: A Rehabilitation Approach**

    https://freepsychotherapybooks.org/psychotherapy/checkout/task-step/step-1

PSY 306L Introduction to Clinical Psychology Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After completion of this course, the students will be able to:

- Develop skills in the administration and interpretation of various projective tests.
- Discuss ethical issues in the administration of various tests.
- Identify and handle problems in data collection and dealing with the clients.

Practice any six tests from the following tests:

1. Sentence Completion Test
2. Word Association Test
3. General Health Questionnaire
4. NEO – FFI
5. Wechsler Tests: WAIS / WISC / WPPI
6. Draw –a-man Test / House-Tree-Person Tests
7. MMPI
8. Depression, Anxiety, Stress Scale
9. Raven's Advanced Progressive Matrices
10. Davis's Battety of Differential Ability
11. Kaufman Assessment Battery

Public Administration

First Semester

PUB 101 Indian Administration- I

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Historical Background of Indian Administration with special reference to the influence of British Rules, Salient features of Indian Administration since Independence.

Unit 2 The Union Executive : President, Prime Minister, Council of Ministers .

Unit 3 The Organization and Functions of Central Secretariat, Cabinet Secretariat, Prime Minister's Office.

Unit 4 The Organization and Functions of Ministry of Home, Finance and Ministry of Personnel, Pension and Public Grievances.

Unit 5 Major Forms of Pubic Enterprises in India: Department, Corporations, Companies.

Learning Outcomes: After completion of this course, the students will be able to:

- Know about the history of Administration in India and influence of British rule in Indian administration.
- Develop a clear understanding of Indian Administration system and processes.
- Comprehend the functions of these institutions.

Recommended Books:

1. ARC 1st Report on *Personnel Administration* (1966). Government of India.

2   Appleby, P. H. (1953). *Public Administration In   India Report of a Survey*. GOI.

3   Arora, Ramesh & Goyal, Rajni (1995). *Indian public administration: institutions and issues*. Jaipur: wishwa prakash.

4   Bhambhari, C. P. (1973). *Public Administration in India*. Delhi: Vikas.

5   Fadia, B.L. (2010). *Public Administration in India*. Agra: Sahitya Bhawan Publication. (Hindi & English)

6   Jain, R. B. (1976). *Contemporary Issues in Indian Administration*. New Delhi.

7   Kataria, Surendra (2000). *Public administration in India*. Jaipur: RBSA publisher. (Hindi)

8   Maheshwari, sriram (1984). *Indian Administration*. New Delhi: Orient Longman.

9   Sarkar, Siuli (2010). *Public Administration in India*. New Delhi: PHI learning private limited.

10   Sharma, P. (1978). *Public Administration In India*. Delhi: Meenakshi.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30

- Indian journal of public administration https://us.sagepub.com/en-us/nam/indian-journal-of-public-administration/journal202581#description

- Journal of Public Administration Research and Theory: J-PART-http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

PUB 103 Principles of Public Administration - I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1   Meaning, Nature and Scope of Public Administration, Importance of Public Administration in Modern Society.

Unit 2   Evolution of the study of Public Administration. New Public Management and Good Governance.

Unit 3   Public Administration as a Social Science; Its relationship with other social sciences: Political Science, Economics, Sociology, Law and Psychology.

Unit 4   Approaches to the Study of Public Administration: Classical, Humanistic, Behavioral and Systems.

Unit 5   Public and Private Administration, Formal and Informal Organization, Modern Techniques of Administration: PERT and CPM.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the evolution and development of Public Adminisration as a discipline.
- Comprehend the concept and application of good governance.
- Develop interdisciplinary insight about the subject.

Recommended Books:

1. Arora, Ramesh K. (2012), *Public Administration: Fresh Perspectives*, Jaipur, Aalekh Publishers.
2. Bhambri, Chandra Praksh. (1976), *LokPrashasan*, Agra, Lakshmi Narayan (Hindi, English)
3. Chakrabarty, B. & Chand, Prakash (2017), *Public administration from government to governance*, Jaipur, orient Black Swan
4. Fadia, B.L., (2010), *Public Administration (Administrative Theory & Concepts)*, SahityaBhawan Publication, Agra (Hindi & English)
5. Goel, S.L. (2005). *Public Administration (Administrative Theory & Practice)*, New Delhi, Deep & Deep Publication.
6. Goel, S.L. & Rajneesh Shalini (2002). *Public Personal Administration Theory & Practice)*, New Delhi, Deep & Deep Publication.
7. Kataria, Surendra (2000). *Element of public Administration*, Jaipur, RBSA publisher (Hindi).
8. Sapru, R.K. (2016). *Administrative Theories & Management Thought*, Delhi, PHI Learning private limited.
9. Singh, Hoshiar & Singh, Mohinder (1989). *Public Administration In India: Theory and Practice*, New Delhi, Sterling Publishers Private Limited.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30\
- Indian journal of public administrationhttps://us.sagepub.com/en-us/nam/indian-journal-of-public-administration/journal202581#description
- Journal of Public Administration Research and Theory: J-PARThttp://www.jstor.org/action/showPublication?journalCode=j publadmiresethe

Second Semester

PUB 102 Indian Administration-II

Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

Unit 1 Financial Administration: Budget Formulation, Budget Approval and Budget Execution.

Unit 2 Comptroller and Auditor General, Parliamentary Committees; Public Accounts Committee and Estimate Committee

Unit 3 Control over Administration: Legislative, Executive, Judicial and Lokpal

Unit 4 Personnel Administration: Classification, Recruitment, and Training of All India Services.

Unit 5 Problems of Administrative Corruption and Administrative reforms in India with special reference to first & second Administrative Reforms Commission.

Learning Outcomes: After completion of this course, the students will be able to:

- Gain the knowledge of typical process of budget formulation, its approval and execution.
- Familiarise themselves with CAG, Parliamentary Committees and administrative reforms in India.
- Become aware about Personnel administration and their problems like administrative corruption in India.

Recommended Books:

1 ARC 1st Report on *Personnel Administration* (1966). Government of India.

2 Appleby, P. H. (1953). *Public Administration In India Report of a Survey*. GOI.

3 Arora, Ramesh & Goyal, Rajni (1995). *Indian public Administration: Institutions and Issues*. Jaipur: wishwa prakash.

4 Bhambhari, C. P. (1973). *Public Administration in India*, Delhi:Vikas.

5 Fadia, B.L. (2010). *Public Administration in India.* Agra: Sahitya Bhawan Publication. (Hindi & English)

6 Jain, R. B. (1976). *Contemporary Issues in Indian Administration*. New Delhi.

7　Kataria, Surendra (2000). *Public administration in India*. Jaipur: RBSA publisher.(Hindi)

8　Maheshwari, sriram (1984). *Indian Administration*. New Delhi: Orient Longman.

9　Sarkar,Siuli (2010). *Public Administration in India*. New Delhi: PHI learning private limited.

10　Sharma, P. (1978). *Public Administration In India*. Delhi: Meenakshi.

Suggested E- Resources:

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30
- Indian journal of public administration- https://us.sagepub.com/en-us/nam/indian-journal-of-public-administration/journal202581#description
- Journal of Public Administration Research and Theory: J-PART

  http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

PUB 104 Principles of Public Administration-II

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1　Principles of Organization: Hierarchy, Unity of Command, Span of Control, Delegation, Co-ordination.

Unit 2　Centralization, Decentralization, Line and Staff, Authority and Responsibility.

Unit 3　Leadership, Communication, Decision Making.

Unit 4　Personnel Administration: Meaning, Nature and Types of Bureaucracy, Contribution of Max Weber.

Unit 5　Personnel Administration: Classification, Recruitment, Training, Promotion.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the principles of organization.
- Develop on understanding about the concept of communication and leadership.

- Understand the various processes of recruitment, training and promotion under Administration.

Recommended Books:

1. Arora, Ramesh K. (2012). *Public Administration : Fresh Perspectives*. Jaipur: Aalekh Publishers.

2. Bhabri, Chandra (1976). *LokPrashasan*. Agra: Lakshmi Narayan.(Hindi, English)

3. Chakrabarty, B. & Chand, Prakash (2017). *Public Administration from government to Governance*. Jaipur: orient Black Swan.

4. Fadia, B.L., (2010). *Public Administration (Administrative Theory & Concepts)*. Agra: Sahitya Bhawan Publication. (Hindi & English)

5. Goel, S.L. (2005). *Public Administration (Administrative Theory & Practice)*. New Delhi: .Deep & Deep Publication.

6. Goel, S.L. & Rajneesh, Shalini (2002). *Public Personnal Administration Theory & Practice)*. New Delhi: Deep & Deep Publication.

7. Sapru, R.K.(2016). *Administrative Theories &Management Thought*. Delhi: PHI Learning private limited.

8. Singh, Hoshiar & Singh, Mohinder (1989). *Public Administration In India: Theory and Practice*. New Delhi: Sterling Publishers Private Limited.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30

- Indian journal of public administration-https://us.sagepub.com/en-us/nam/indian-journal-of-public-administration/journal202581#description

- Journal of Public Administration Research and Theory: J-PARThttp://www.jstor.org/action/showPublication?journalCode=j publadmiresethe

Third Semester

PUB 201 Administrative Institution in India- I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1 Administrative Institutionsin a Democratic and Socialist Society. The Concept of Laissez faire state. Welfare state and Administrative state.

Unit 2 Organization of Government: Legislature its role and Decline in Modern times, Executive Types and Relationship with Legislature.

Unit 3 Organization of Government: Judiciary its Functions and roles with special Reference to the power of Judicial Review and Judicial Activism.

Unit 4 Democracy and Administration: features of a Democratic Administration. Role of Bureaucracy in a Democratic Country.

Unit 5 Political Parties and Pressure groups and their interaction with each other.

Learning Outcomes: After completion of this course, the students will be able to:

- Develop an understanding of constitutional and extra constitutional bodies.
- Enhance their vision about Indian Administration.
- Learn about the functions of political parties and pressure groups.
- Develop understanding about administrative institutions.

Recommended Books:

1. Arora, Ramesh. K. (1995). *Indian Public Administration: Instutions and Issues*. Delhi: New Age International.
2. Field, G. Lowell (1951).*Government in Modern Society*. New York: McGraw Hill.
3. Jayapalan, N. (1999). *Modern Government*.New Delhi: Atlantic .
4. Johri ,J.C. (2012). *Indian Government and Politics* (I & II). Jalandhar: shoban Lal & Co. (Hindi)
5. Sodhi, Singh Inderjeet (2005). *Administrative institutions in India*. Jaipur: University Book House.

6. Waldo, Dwight (1948). *The Administrative State*. New York: the Ronald Press Company.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30
- Indian journal of public administration- https://us.sagepub.com/en-us/nam/indian-journal-of-public-administration/journal202581#description
- Journal of Public Administration Research and Theory: J-PART http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe
- Journal of Elections, Public Opinion & Parties - http://www.tandfonline.com/loi/fbep20

PUB 204 State Administration in India with Special Reference to Rajasthan-I

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1   General Background of the State Administration in India and Its growing Importance. Integration of Rajasthan state.

Unit 2   The office of Governor, Its Powers, Functions, Role and Relationship with Council of Ministers. Chief Minister's Role and Functions and its Relationship with Council of Minister

Unit 3   Centre – State Relations: Legislative, Administrative and Financial.

Unit 4   Organization and Role of the State Secretariat, Secretariat-Directorate Relationship, Role and Significance of Chief Secretary in State Administration.

Unit-5   Organization and Functions of the Departments of Home, Finance and Planning in Rajasthan.

Learning Outcomes: After completion of this course, the students will be able to:

- Comprehend the administrative setup of state administration.
- Describe the constitutional status of center-state administration.
- Analyze the changing scenario of various departments and institutions.

Recommended Books:

1. A.R.C. Report (1966). *On State Administration*. Government of India.

2. Khera, S.S. (1974). *District Administration in India*. New *York: Asia Publishing House*.

3. Maheshwari, S.R. (1979). *State Government in India*. Delhi: The Macmillann Company of India.

4. Pylee, M.V. (1967). *Indian's Constitution*. Bombay: Asia publishing House.

5. Sharma, Ravindra (2018). *State Administration*. Delhi: Prabhat Prakashan.

6. Verma, S.L. (1974).*Revenue Board in Rajasthan*. New Delhi: S. Chand.

Suggested E- Resources:

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30

- Local Government Studieshttp://www.tandfonline.com/loi/flgs20

- State& Local Government Review

  http://www.jstor.org/action/showPublication?journalCode=statloca goverevi

- Journal of Public Administration Research and Theory: J-PART - http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

Fourth Semester

PUB 202 Administrative Institution in India- II

Max. Marks : 100   L   T   P   C
(CA: 40 + ESA: 60)   4   0   0   4

Unit 1   Planning Institutions: From Planning commission to NITIAayog (National Institution for Transforming India), National Developmental council.

Unit 2   Organization and Function of Finance Commission and Election Commission with the administration of Election in India.

Unit 3   Organization, Functions and Role of Union Public Service Commission and University Grants Commission.

Unit 4 Organizations and Functions of Railway Board, Central Social Welfare Board.

Unit 5 Regulatory Authorities in India and their role in administration with special reference to TRAI, IRDA and RBI.

Learning Outcomes: After completion of this course, the students will be able to:

- Develop an understanding of constitutional and extra constitutional bodies.

- Enhance their vision about Indian Administration.

- Learn the functions and organization of Finance Commission, Election Commission, Railway Board, and Central Social Welfare Board.

Recommended Books:

1. Arora, Ramesh. K. (1995). *Indian Public Administration: Instructions and Issues*. Delhi: New Age International.

2. Field, G. Lowell (1951). *Government in Modern Society*. New York: McGraw Hill.

3. Jayapalan, N. (1999). *Modern Government*. New Delhi: Atlantic.

4. Johri, J.C. (2012). *Indian Government and Politics* (I & II). Jalandhar: shoban Lal & Co. (Hindi)

5. Sodhi, Inderjeet Singh (2005). *Administrative institutions in India*. Jaipur: University Book House.

6. Waldo, Dwight (1948). *The Administrative State*. New York: The Ronald Press Company.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30

- Indian journal of public administration- https://us.sagepub.com/en-us/nam/indian-journal-of-public-administration/journal202581# description

- Journal of Public Administration Research and Theory: J-PART http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

- Journal of Elections, Public Opinion & Parties -

  http://www.tandfonline.com/loi/fbep20

PUB 205 State Administration in India with Special Reference to Rajasthan-II

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1 Personnel Administration: Organization and working of the Rajasthan Public Service Commission (RPSC), Recruitment in State Civil Services.

Unit 2 Personnel Administration: Training of state civil services. Organization and role of H.C.M. RIPA and other state level Training Institute in Rajasthan.

Unit 3 Board of Revenue, Office of Divisional Commissioner and Role of District Collector in District Administration.

Unit 4 Revenue Administration: The role of SDO, Tehsildar and Patwari.

Unit 5 Lokayukta, Administrative Reforms in Rajasthan, E-governance Initiatives in Rajasthan.

Learning Outcomes: After completion of this course, the students will be able to:

- Learn about the institutional framework of personnel administration.
- Develop an overall understanding about revenue administration.
- Learn about the administrative initiatives, problems and reforms in state administration.

Recommended Books:

1   A.R.C. Report (1966). *On State Administration*.Government of India.

2   Khera, S.S. (1974). *District Administration in India.* New *York: Asia Publishing House*.

3   Maheshwari, S.R. (1979). *State Government in India.* Delhi: The Macmillann Company of India.

4   Pylee, M.V. (1967). *Indian's Constitution*. Bombay: Asia publishing House.

5   Sharma, Ravindra (2018). *State Administration*. Delhi: PrabhatPrakashan.

6   Verma, S.L. (1974). *Revenue Board in Rajasthan*. New Delhi: S.Chand.

7 Pylee, M.V. (1967), *Indian's Constitution*, Bombay, Asia publishing House.

8 Sharma, Ravindra (2018). *State Administration*, Delhi, PrabhatPrakashan.

9 Verma, S.L. (1974). *Revenue Board in Rajasthan*, New Delhi, S.Chand.

Suggested E- Resources:

- State& Local Government Review http://www.jstor.org/action/showPublication?journalCode=statloca goverevi

- Local Government Studies http://www.tandfonline.com/loi/flgs20

- Journal of Public Administration Research and Theory: J-PART http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

Fifth Semester

PUB 303 Comparative Administrative Systems

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Meaning, Nature, Scope and Significance of Comparative Public Administration.
Approaches to the study of Comparative Administration: Structural Functional and Ecological.

Unit 2 Salient features of the Constitution of UK, USA, and France.

Unit 3 Parliamentary System in UK, Presidential System in USA and Presidential System in France.

Unit 4 Salient features of Administrative Systems of UK, USA and France with particular reference to their Central Administration and Nature and Role of Civil Service.

Unit 5 Independent Regulatory Commission in USA, French Council of State, Swedish Ombudsman.

Learning Outcomes: After completion of this course, the students will be able to:

- Know about the administrative system of various countries like UK, USA and France.

- Learn about the Role of civil services in the administrative system of these countries.

- Develop knowledge about various controlling authorities in USA, France, and Sweden.

- Do a comparative study of administrative systems of these countries.

Recommended Books:

1. Bhagwan, Vishnu & Bhushan, Vidya (2012). *World Constitutions: A comparative study*. New Delhi: sterling publishers PVT. Ltd.

2. Chaturvedi, T.N. (1992). *Comparative Public Administration*. Jaipur: Research publication.

3. Gena, C.B. (2009). *Tulnatmak Rajniti*. New Delhi: Vikash publishing house Pvt Ltd. (Hindi)

4. Goyal, S.L. & Rajanish, Shalini (2002).*Public Personnel Administration (theory and practice)*.New Delhi: Deep and Deep publication.

5. Headdy, Ferrel (1966).*Public Administration: A Comparative Perspective*. Prentice Hall: Englewood Cliffs NJ.

6. Mahajan,V.D. (2017). *Modern Select Governments*. New Delhi: S. Chand & Company PVT Ltd.

7. Ogg, Fredisk & Zink (1949). *Modern Foreign Government*.New work: The Mcmillan Co.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30

- Journal of Public Administration Research and Theory: J-PART

- http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

Sixth Semester

PUB 301 Administrative Thinkers

Max. Marks : 100   **L T P C**

(CA: 40 + ESA: 60)   **4 0 0 4**

1. Administrative Ideas of Henri Fayol and F.W.Taylor with particular reference to:
   a. Henri Fayol:
      i. Managerial Activities
      ii. Principles of Organization
   b. F.W. Taylor:
      i. The scientific management movement
      ii. Impact of Taylorism on Organization Theory

Unit 2 Administrative Ideas of Max Weber, Elton Mayo with special reference to:
   a. Max Weber:
      i. Authority and Legitimacy
      ii. Ideal Type Model of Bureaucracy
   b. Elton Mayo:
      i. Hawthorne Experiments
      ii. Human Relation Approach

Unit 3 Administrative Ideas of Chester I. Barnard and Herbert Simon with special reference to:
   a. Chester I. Barnard:
      i. Organization as a consciously coordinated cooperative system
      ii. Authority and Responsibility
   b. Herbert Simon:
      i. Decision making as heart of administration
      ii. Stages in decision making process
      iii. Rationality in decision making

Unit 4 Administrative Ideas of Abraham Maslow and Frederick Herzberg with special reference to:
   a. Abraham Maslow:
      i. Need- Hierarchy Theory

    b.   Frederick Herzberg:
- i.   Two factor theory
- ii.   Job Enrichment

Unit 5   Administrative Ideas of RensisLikert, Fred.W.Riggs:

    a.   RensisLikert:
- i.   Management System 1-4

    b.   F.W. Riggs:
- i.   Sala Model in Prismatic Society
- ii.   Concept of Development

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the major theories given by various administrative thinkers.
- Analyze the administrative theories.
- Enhance their knowledge of management,motivation and leadership.

Recommended Books:

1. Barnard, Chester (1938).*The Functions of the Executive*. Cambridge M. A: Harvard University Press.
2. Fayol, Henri (1949). *General & Industrial Management*. London: pitman.
3. Luthans, Fred (2010). *Organation Behaviour*. Cornell University: McGraw Hill.
4. March & Simon (1958). *Organisation*. New York: John Wiley & Sons.
5. Prasad, Prasad & Satyanarayana (1993). *Administrative Thinkers*. New Delhi: Jawahar Publishers and Distributors. (English & Hindi)
6. Sapru, R.K. (2016). *Administrative Theories and Management Thought*. New Delhi: PHI Learning Private Limited.
7. Sharma, J.D. & Surana, J.S. (1992). *History of Management Thought*. Jaipur: Ramesh Book Dipo.
8. Sharma, P. D. (2000). *Management Thought and Thinkers*. Delhi: Research Publishers.

9. Simon, Herbert (1947). *Administrative Behaviour*. United States America: Macmillan.

10. Taylor, F.W.(1919). *The Principles of Scientific management*. Harvard University: Haper& Brothers.

11. Thori, Narendra & chaudhary, Nilam (2002). *Administrative Thinkers*. Jaipur: RBSA.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30
- Journal of Public Administration Research and Theory: J-PART- http://www.jstor.org/action/showPublication?journalCode=jpublad miresethe

Discipline Electives

PUB 305 Rural Local Self Government

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Meaning, nature and significance of Rural Local Government in India. The History of Panchayati Raj in India.

Unit 2 Nature and problems of Rural India. Policies and Programmes of rural development Panchayat patterns in India with special reference to 73rd Constitutional Amendment.

Unit 3 Panchayati Raj in India (with special reference to Rajasthan) Organization. Structure, Powers and functions of Zila Parishad, Panchayat Samiti, Gram Panchayat, Gram Sabha.

Unit 4 Personnel Administration in Panchayat Raj: Classification, Recruitment and Training.

Unit 5 Management of Financial Resources in Panchayat Raj, System and Nature of State Control Over Panchayati Raj.

Learning Outcomes: After completion of this course, the students will be able to:

- Develop knowledge of Rural Local self-government.
- Understand the Personnal Administration in Panchayti Raj.
- Become aware about the system and Nature of state control over panchayti Raj..

Recommended Books:

1. Khanna, R.L. (1967). Municipal Government and Administration in India. Chandigargh: Mohindra Capital.

2. Maheshwari, Sriram (1984). *Bharart me SthaniyeSarkare*. Delhi: Oriental.(Hindi)

3. Maheshwari, S.R. (2017). *Local Government in India*.Agra: Lakshmi Narayan Aggrawal.

4. Mathur, M.V. (1966). *Panchayati Raj in Rajasthan*. New Delhi: Impex India haik.

5. Myneni, S.R. (2016). *Local Self Government.* Allahabad: Allahabad Law Agency.

6. Reddy, G.R. (1997). *Panchayati Raj in India*. New Delhi: Macmillion.

7. Sachadeva, Pradeep (2011).*Local Government InIndia*.New Delhi: Pearson.

8. Singh, Pankaj (2017). *Rural local Government*. Delhi: kitabMahal.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30
- State& Local Government Review

  http://www.jstor.org/action/showPublication?journalCode=statloca goverevi
- Alternatives: Global, Local, Political
- http://www.jstor.org/action/showPublication?journalCode=alternatives

PUB 308 Labour Welfare Administration

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Meaning, nature and scope of labour welfare, principles of Labour Welfare Administration. Organization and functions of ministry of labour Employment

Unit 2 Office of the Chief Labour Commissioner, organization and functions of central labour Bureau. Organization and working of state labour department and directorate of labour.

Unit 3 Brief history, organization, functions and shortcomings of trade union in labour Administration in India. ILO (International Labour Organization): power and functions, ILO's impact on labour policy in India.

Unit 4 Labour policy and legislation in India. Industrial relations in India. Worker's education and training, participation.

Unit 5 The following Labourlaws: Factories Act 1948, Industrial Dispute Act 1947, Trade union Act. 1926, Minimum wages Act, 1948.

Learning Outcomes: After completion of this course, the students will be able to:

- Know about Labour Welfare Administration in India.
- Understand international labour organization, labour policy and legislation in India.
- Familiarize themselves with worker's education and training.
- Become aware about various labour laws.

Recommended Books:

1. Vaid,K.N. (1970).*Labour Welfare in India*. New Delhi: Shri Ram center for Industrial Relation.
2. Sing V.B. (2011).*Industrial Relation &Trade Union*.Himalayan Book.
3. Malik.P.L. (2009).*Industrial Law*. Eastern book company.
4. Subramaniam, K.N.(1967).*Labour-Management Relation in India*.Asia Publishing House.
5. Bhatnagar,Deepak. (1985).*State and Labour Welfare in india* .New Delhi:Deep&Deep publication.
6. Bhatnagar, Deepak (1984). *Labour Welfare and Social Security Legislation in India*. Humanities. New Delhi: Deep & Deep publication.
7. Punekar, S.D.& Deodhar, S.B. (2011). *Labour Welfare, Trade Unionism and Industrial Relations*.India: Himalayan books.
8. India, (1969). *Report of National Commission on Labour*.
9. *In*dia, (1969). *Report of Labour InvestigationCommittee.*

E-resources

- https://labour.gov.in/
- https://elibrary.worldbank.org/

- https://www.bl.uk/social-welfare
- http://www.bath.ac.uk/gwlibrary/
- Website of Ministry of Labour and Employment
- Website of Directorate General of Factory Advice Service and Labour Institute
- Website of Directorate General of Employment and Training
- Website of Labour Bureau of Ministry of Labour and Employment
- Official website of Employees' Provident Fund Organisation.

PUB 306 Urban Local Self Government

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Meaning, nature and significance of Local Government in India. Nature and Importance of Urban Local Government in India. Development of Urban Local Government.

Unit 2 Growing Urbanization – Its Causes and Problems. The Organizational structure of Urban Local Self Government in India with special reference to the 74th constitutional Amendment Acts.

Unit 3 The Composition functions, powers and Role of various kinds of Local Bodies. Administrative system of metropolitan Towns, Municipal Corporations and municipal Council.

Unit 4 Municipal Personnel Administration: Classification, Recruitment and training.

Unit 5 Management of Financial Resources in Urban Local Bodies, system and Nature of state control over Urban Local Bodies.

Learning Outcomes: After completion of this course, the students will be able to:

- Perceive knowledge of Urban Local Self Government.
- Analyze the structures and functions of agencies involved directly and indirectly in administration.
- Comprehend the election process of local bodies, Role of Local elections and nominated executives.

Recommended Books:

1. Khanna, R.L. (1967). Municipal Government and Administration In India. Chandigargh: Mohindra Capital.

2. Maheshwari, Sriram (1984).*Bharart me Sthaniye Sarkare*. Delhi: Oriental. (Hindi)

3. Maheshwari, S.R. (2017). *Local Government in India*.Agra: Lakshmi Narayan Aggrawal.

4. Mathur, M.V. (1966). *Panchayati Raj in Rajasthan*. New Delhi: Impex India haik.

5. Myneni, S.R. (2016). *Local Self Government*. Allahabad: Allahabad Law Agency.

6. Reddy, G.R. (1997). *Panchayati Raj in India*.New Delhi: Macmillion.

7. Sachadeva, Pradeep (2011). *Local Government in India*. New Delhi: Pearson.

8. Singh, Pankaj (2017). *Rural local Government*. Delhi: Kitab Mahal.

Suggested E- Resources

- https://epgp.inflibnet.ac.in/ahl.php?csrno=30

- State& Local Government Reviewhttp://www.jstor.org/action/showPublication?journalCode= statlocagoverevi

- Alternatives: Global, Local, Political- http://www.jstor.org/action/showPublication?journalCode=alternat ives

PUB 307 Governance : Issues and Challenges

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Government and Governance: Concept of the State, Government and Governance; Civil Society; Role of State In the era of Globalization.

Unit 2 Governance and Development: Changing Dimensions of Development, Strengthening Democracy through Good Governance.

Unit 3 Environmental Governance: Human-Environment Interaction; Green Governance: Sustainable Human Development.

Unit 4 Local Governance: Democratic Decentralization. People's Participation in local Governance; The process of Urbanization, causes and problems.

Unit 5 Good Governance in India: Public Service Guarantee Acts, Electronic Governance, Citizens Charter & Right to Information.

Learning Outcomes: After completion of this course, the students will be able to:

- Know the concept of state, governance and state's role in Globalized era.

- Understand the concept of governance and development.

- Become aware about the Environmental governance, Local Governance and good governance initiatives in India.

Recommended Books:

1. Chakrabarty B. and Bhattacharya M. (eds.) (1998).*The Governance Discourse.* NewDelhi: Oxford University Press.

2. Munshi, Surendra & Abraham, Biju Paul [eds.]. (2004). *Good Governance, Democratic Societies and Globalization*. Delhi: Sage Publishers.

3. United Nation Development Programme. (1997). New York: *Reconceptualising Governance*.

4. Johns Hopkins University (2001). The Georgetown Public Policy Review. Volume-VII, No.1

5. Chotray, Vasudha & Stroker, Gery (2008). Governance Theory: Across Disciplinary Approach. Palgrave Mcmillan.

6. Nayar, B. (ed.). (2007). *Globalization and Politics in India*. Delhi: Oxford University Press, 2007. pp. 218-240.

7. Shah, Ghanshyam. [ed.]. (2002). *Social Movements and The State*, New Delhi: Sage Publication.

8. Panda, Smita Mishra (2008). *Engendering Governance Institutions: State, Market and Civil Society*. Sage Publications.

9. Chandhoke, Neera (1995). *State and Civil Society Explorations in Political Theory*, Sage Publishers.

10. Smith, B.C. (2007). *Good Governance and Development. New Delhi:* Palgrave.

Suggested E – Resources

- Annual Report. (2015) – "e-Governance Policy Initiatives under Digital India", Dept. of Electronics and Information Technology, Ministry of Communication and Information

- Commission, Planning. Environment and Ecology. December 12, 2014. http://planningcommission.gov.in/plans/planrel/fiveyr/7th/vol2/7v2ch18.htm l (accessed December 2, 2015).

- https://gpcb.gov.in/images/pdf/PrasadModak_GPCB.pdf

- https://darpg.gov.in/sites/default/files/local_governance6.pdf

- https://rural.nic.in/media/ebook1http://en.wikipedia.org/wiki/Demographics_of_India

PUB 309 Nation Building: A Global Perspective

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Unit 1 Nation Building: Conceptual Framework – Nation, State, Nationality, and Nationalism, Nation- Building and State-Building.

Unit 2 Elements of Nation Building: Theories of nationalism-Primordialism and modernism;

Recent critiques of nationalism and nation state.

Unit 3 Growth of Nation-States: Historical Perspectives;

Western model of Nation Building, British and German. Experience with the socialist model of national building special reference to China

Unit 4 Rise of nation states in the third world: Asia, Africa and Latin America

Problems of Nation-Building in Developing Regions.

Unit 5   The International Politics of Nation-Building

Nationalism and Globalization; Nation Building in a Post-Globalization Era.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the core concepts of nation, nationality, nationalism and Nation building.
- Understand the debates on the emergence of nationalism in a variety of historical contexts.
- Understand the growth of nation states in the third world.
- Get an overview of the post globalization era and recent trends in the world.

Recommended Books:

1. G. Aloysius (1997). *Nationalism without a Nation in India*. Delhi: Oxford University Press.
2. Anthony D Smith (1971). *Theories of Nationalism*. London: Duckworth, 1st Edition.
3. Anthony D Smith (1979). N*ationalism in the Twentieth Century*.Oxford: Martin Robertson.
4. Ashis Nandy (1994).*The Illegitimacy of Nationalism, Rabindranath Tagore and the Politics of Self*. Delhi: Oxford University Press.
5. E.J Hobsbawm (1990). *Nations and Nationalism since 1780, Programme Myth and Reality*. Cambridge: Cambridge University Press.
6. Ernest Gellner (1983) *Nations and Nationalism*.   Oxford: Blackwell, Oxford.
7. Etienne Balibar and Immanuel Wallerstein (1991). *Race, Nation, Class, Ambiguous Identities.*London: Verso.
8. Eugene Kamenka ed. (1976).*Nationalism: The Nature and Evolution of an Idea*. London: Edward Arnold.
9. Hugh Seton-Watson (1977).*Nations and States, An Enquiry into the Origins of Nations and the Politics of Nationalism*. Boulder, Colorado: Westview Press.
10. Jurgen Habermas (2002). *The Postnational Constellation*. Cambridge: MIT Press.
11. Mike Featherstone ed. (1990). *Global Culture: Nationalism, Globalisation and Modernity*, London: Sage.

12. Partha Chatterjee (1994). *The Nation and its Fragments*.Delhi: Oxford University Press.
13. Paul Gillen and Devleena Ghosh (2007). *Colonialism and Modernity*. Sydney: UNSW Press.
14. Walker Connor (1994), *The National Question in Marxist-Leninist Theory and Strategy*. Princeton: Princeton University Press.

Suggested E – Resources

- https://journals.co.za/content/journal/aa_jonps
- https://journals.sagepub.com/doi/10.1177/0020852309365666
- https://www.tandfonline.com/doi/full/10.1080/14623528.2019.1599517
- https://ascelibrary.org/doi/10.1061/41149%28393%2910
- https://www.jstor.org/stable/41855201?seq=1#metadata_info_tab_contents
- https://journals.sagepub.com/doi/full/10.1177/2348448918759875
- https://www.tandfonline.com/doi/full/10.1080/10357711003736451
- https://www.jstor.org/stable/42744015?seq=1#metadata_info_tab_contents

PUB 310 Nation Building: An Indian Perspective

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Unit 1   Nation Building: India and its Nationhood- Factors, Evolution and Development of Nation Building in India.

Unit 2   Nation Building in India: Rise of the nation state and integration in India.

Unit 3   Nation Building in India: Socio-Economic Process

Social Process: Role of Identity and Social Cleavages in nation building- Caste, Class, Religion.

Economic Process: Role of Planning in nation building, Recent trends in economic process of nation building.

Unit 4   Nation Building in India: Political Process

Democracy and participation, Role of Institutions.

Unit 5   Nation Building in India: Issues and Challenges

Politics of regionalism: Linguistic Identity, Secessionist movements

Recent Trends in Indian Nationalism.

Learning Outcomes: After completion of this course, the students will be able to:

- Understand the evolution and factors responsible for nation building in India.
- Understand the rise and integration of the Indian nation state.
- Analyze the economic, political and social processes contributing to nation building in India.
- Assess the issues and challenges related to nation building in India.
- Understand recent trends in Indian Nationalism.

Recommended Books:

1. Narayan Jayaprakash (1975). *Nation Building in India*, Varanasi: Navachetan Prakashan.
2. Yogesh, Atal. (1981). *Building a Nation(essays on India)*. Abhinav Publisher: New Delhi
3. Gyanendra Pandey, (1998). *Peasant Revolt and Indian Nationalism*. Ranajit Guha and Gayatri Chakraborty Spivak eds. (1988). Selected Subaltern Studies. New York: Oxford University Press, pp. 233-287.
4. Gyanendra Pandey. (1990). *The Construction of Communalism in Colonial North India*, New York: Oxford University Press.
5. Marc Galanter. (1997). *Law and Society in Modern India*, Oxford: Oxford University Press.
6. Rajni Kothari. (1970).*Caste in Indian Politics*, Delhi: Orient Longman.
7. Sarangi, Asha ed. (2009). *Language and Politics in India*, Oxford University Press, New Delhi.
8. Sekhar Bandyopadhyay ed. (2011). *Nationalist Movement in India: A Reader*, New Delhi: Oxford University Press.
9. G. Aloysius. (1997). *Nationalism without a Nation in India*, Delhi: Oxford University Press.
10. Anthony D Smith. (1971). *Theories of Nationalism*, London: Duckworth. 1st Edition.

11. Ashis Nandy. (1994). *The Illegitimacy of Nationalism, Rabindranath Tagore and the Politics of Self*, Delhi:Oxford University Press.
12. Craig Calhoun. (1997). *Nationalism*, Buckingham: Open University Press.
13. E.J Hobsbawm. (1990) *Nations and Nationalism since 1780, Programme Myth and Reality*, Cambridge: Cambridge University Press.

Suggested E – Resources

- https://journals.co.za/content/journal/aa_jonps
- https://journals.sagepub.com/doi/10.1177/0020852309365666
- https://www.tandfonline.com/doi/full/10.1080/14623528.2019.1599517
- https://ascelibrary.org/doi/10.1061/41149%28393%2910
- https://www.jstor.org/stable/41855201?seq=1#metadata_info_tab_contents
- https://journals.sagepub.com/doi/full/10.1177/2348448918759875
- https://www.tandfonline.com/doi/full/10.1080/10357711003736451
- https://www.jstor.org/stable/42744015?seq=1#metadata_info_tab_contents

संस्कृत

प्रथम समसत्र

SANS 102 आधुनिक नाट्य एवं व्याकरण

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- व्याकरणबोध से भाषा– संरचना को समझना।

- शुद्धोच्चारण, पठन व अर्थावबोध सम्बन्धी कौशल का विकास करने के साथ–साथ विश्लेषण क्षमता का विकास हो सकेगा।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति	–	**आधुनिक नाट्य**, आम्रपालीः डॉ. मिथिलेश कुमारी मिश्रा।
द्वितीय अन्विति	–	**निर्धारित नाट्य ग्रन्थ** के प्रतिपाद्य से सम्बद्ध एक प्रश्न या दो टिप्पणी।
तृतीय अन्विति	–	**व्याकरण** (लघु–सिद्धान्त–कौमुदी) संज्ञा प्रकरण।
चतुर्थ अन्विति	–	**व्याकरण** (लघुसिद्धान्तकौमुदी) अच् सन्धि प्रकरण।
पंचम अन्विति	–	**व्याकरण** (लघुसिद्धान्तकौमुदी) सन्धि प्रकरण से प्रयोग सिद्धि।

परीक्षा योजना

समय : तीन घण्टे   पूर्णांक : अंक 60

नोट :– यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जाएँगें।

अन्विति 1	गद्य का अनुवाद (एक)	6 अंक
	पद्य की व्याख्या (एक)	6 अंक=12 अंक
अन्विति 2	एक प्रश्न अथवा दो टिप्पणी	12 अंक
अन्विति 3	आठ प्रत्याहार एवं चार संज्ञाएँ	12 अंक
अन्विति 4	सूत्र व्याख्या (दो)	6+6 = 12 अंक
अन्विति 5	प्रयोगसिद्धि (चार)	3+3+3+3 = 12 अंक
		कुल योग 60 अंक

संस्कृत पुस्तकें–

1. मिश्रा, मिथिलेश कुमारी, (1989). *आम्रपाली:*; पटना, वाणी वाटिका प्रकाशन।

2. मिश्रा, मिथिलेश कुमारी, *आम्रपाली,* व्या. डोली जैन (2016). जयपुर, सरस्वती पब्लिकेशन।

3. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. महेशसिंह कुशवाहा भाग 1 व 2 (2010), वाराणसी, चौखम्बा सुरभारती प्रकाशन।

4. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. धरानन्द शास्त्री (2014). दिल्ली, मोतीलाल बनारसीदास।

5. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. सदाशिव (सुधा व्याख्या.) (2013). वाराणसी, चौखम्बा संस्कृत सीरीज।

6. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. रामचन्द्र झा (इन्दुमती व्याख्या) (2013). वाराणसी, चौखम्बा अमरभारती प्रकाशन।

7. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. कपिल देव द्विवेदी (2002). संस्कृत व्याकरण एवं लघुसिद्धान्तकौमुदी, वाराणसी, विश्वविद्यालय प्रकाशन।

8. वरदराज, लघुसिद्धान्तकौमुदी व्या. भीमसेन शास्त्री (2007). दिल्ली, भैमी प्रकाशन।

9. वरदराज, *लघुसिद्धान्तकौमुदी, (सन्धि भाग)* व्या. विनोद कुमार झा (2013). दिल्ली, पब्लिकेशन्स।

E-Resources

- Sukumari Bhattacharji, 'Sanskrit Drama and the absence of tragedy'
  https://www.jstor.org/stable/23334390?Search=yes&resultItemClick=true&searchText=abhijnanasakuntala&searchUri=%2Faction

- नरेन्द्रशर्मा, 'लघुसिद्धान्त कौमुदी'
  https://archive.org/details/VaradarajaLaghusiddhantakaumudi1937/page/n1

- 'Glimpses of Indian heritage Varadaraja Raman V.'
  https://archive.org/details/GlimpsesOfIndianHeritageVaradarajaRamanV./page/n13

SANS 103   प्राचीन नाट्य एवं छन्द

Max. Marks : 100　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　**4　0　0　4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- अभिमंचन कौशल का विकास।

- सामाजिक, सांस्कृतिक एवं नैतिक मूल्यों का विकास।

निर्देशः–यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति　　　– प्राचीन नाट्य अभिज्ञानशाकुन्तलम्–1, 2, 4 अंक कालिदास।

द्वितीय अन्विति　　– प्राचीन नाट्य अभिज्ञानशाकुन्तलम्–5,6 (प्रवेशक तक), 7 अंक कालिदास।

तृतीय अन्विति　　– निर्धारित नाटक के प्रतिपाद्य से सम्बद्ध प्रश्न।

चतुर्थ अन्विति　　– छन्दोज्ञान (अभिज्ञानशाकुन्तलम् से लक्षणोदाहरण सहित)।

पंचम अन्विति　　– नाट्य साहित्य का उद्भव एवं विकास।

परीक्षा योजना

समय : तीन घण्टे　　　　　　　　　　　　पूर्णांक – 60 अंक

नोट :–यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे हुए संकेत के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जाऐंगें।

प्रथम अन्विति –　प्राचीन नाट्य

　　1– पद्य की व्याख्या　(एक)　　　　　　　　　– 6 अंक

　　2– गद्य अंश से सूक्तियों का अनुवाद (2 सूक्तियाँ)　– 6 अंक=12 अंक

द्वितीय अन्विति – प्राचीन नाट्य

　　1– पद्य की व्याख्या　(एक)　　　　　　　　　–6 अंक

　　2– गद्य अंश से सूक्तियों का अनुवाद (2 सूक्तियाँ)　–6 अंक=12 अंक

तृतीय अन्विति – निर्धारित नाटक के प्रतिपाद्य से सम्बद्ध प्रश्न

　　निर्धारित नाटक अभिज्ञानशाकुन्तलम् के प्रतिपाद्य अंश से सम्बद्ध

　　प्रश्न–(एक)　　　　　　　　　　　　　　　12 अंक

चतुर्थ अन्विति –छन्दोज्ञान : अभिज्ञानशाकुन्तलम् से लक्षणोदाहरण सहित

स्पष्टीकरण 4 छंद   12 अंक

पंचम अन्विति – नाट्य इतिहास से सम्बद्ध प्रश्न (एक) अथवा टिप्पणी (दो) 12 अंक

योग – 60 अंक

संस्तुत पुस्तकें–

1. उपाध्याय, बलदेव, (1958), *संस्कृत साहित्य का इतिहास,* वाराणसी, काशी हिन्दू विश्वविद्यालय।

2. पाण्डेय, चन्द्रशेखर, व्यास, नानूराम, (2014), *संस्कृत साहित्य की रूपरेखा,* कानपुर, साहित्य निकेतन।

3. गैरोला, वाचस्पति, (1960), *संस्कृत साहित्य का इतिहास,* वाराणसी, चौखम्बा विद्या भवन।

4. व्यास, भोलाशंकर, (1965), *भारतीय साहित्य की रूपरेखा,* वाराणसी, चौखम्बा विद्या भवन।

5. शास्त्री नेमीचन्द, (1972), *महाकवि भास,* भोपाल, हिन्दी ग्रन्थ अकादमी।

6. कालिदास *अभिज्ञानशाकुन्तलम्,* ब्या. बाबूराम त्रिपाठी, (1985), इलाहाबाद, रतन प्रकाशन मन्दिर।

7. कालिदास, *अभिज्ञानशाकुन्तलम्,* व्या. शिवबालक, द्विवेदी (2004), जयपुर, हंसा प्रकाशन।

8. कालिदास *अभिज्ञानशाकुन्तलम्,* व्या. मालवीय सुधाकर, (2002), वाराणसी, कृष्णदास अकादमी।

E-Resources-

*   *अभिज्ञानशाकुन्तलम्–* वसुदेवकृष्ण चतुर्वेदी, *'अभिज्ञानशाकुन्तलम्'*
    https://archive.org/details/in.ernet.dli.2015.485570/page/n1

*   रामदेव झा, शकुन्तला नाटक : एक अध्ययन
    https://archive.org/details/ShakuntalaNatakEkAdhyayanACriticalStudyOfAbhigyanShakuntalamInMaithiliByDrRamdeoJha

*   नवकिशोरकार शास्त्री, 'अभिज्ञानशाकुन्तलम्'
    https://archive.org/details/in.ernet.dli.2015.325943/page/n1

*   Mawatagama pemananada, 'The Role Of Verse in Abhijnanasakuntala, Act-1
    https://www.jstor.org/stable/26264710?Search=yes&resultItemClick=true&searchText=abhijnanasakuntala&searchUri=%2Faction

- Vinaya M. Kshirsagar, 'Use of Rituals-Motifs by Kalidasa'
  https://www.jstor.org/stable/42936441?Search=yes&resultItemCli
  ck=true&searchText=abhijnanasakuntala&searchUri=%2Faction
- बलदेव उपाध्याय, संस्कृत साहित्य का इतिहास
  https://archive.org/details/in.ernet.dli.2015.327677/page/n5
- निन्दी पुंज, संस्कृत साहित्य का इतिहास
  https://archive.org/details/SanskritSahityaKaItihas/page/n81
- ए.बी. कीथ, संस्कृत साहित्य का इतिहास
  https://archive.org/details/in.ernet.dli.2015.350163/page/n1

द्वितीय समसत्र

SANS 101   आर्ष काव्य, निबन्ध एवं अनुवाद

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- राष्ट्रीय चेतना का विकास।

- नैतिक मूल्यों का विकास।

- व्याकरण के अन्तर्गत संज्ञा एवं सन्धि प्रकरण का अवबोध ।

- रामायण एवं महाभारतकालीन भारतीय संस्कृति का ज्ञान।

निर्देशः–यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति – रामायणम् (आदिकविः वाल्मीकिः) बालकाण्ड के प्रथम सर्ग के 1 से 100 तक श्लोक

द्वितीय अन्विति– महाभारतम् (महर्षिः व्यासः) उद्योगपर्व का 131 वाँ अध्याय (विदुलोपाख्यान का प्रथम अध्याय)

तृतीयअन्विति – रामायण एवं महाभारत के प्रतिपाद्य सम्बन्धी प्रश्न

चतुर्थ अन्विति – निबन्ध

पंचम अन्विति – अनुवाद

परीक्षा योजना

समय : 3 घण्टे   पूर्णांक : 60 अंक

नोट :यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जाएँगे।

प्रथम अन्विति – रामायणम् (आदिकवि वाल्मीकिः)

दो पद्यों की व्याख्या   6+6 = 12 अंक

द्वितीय अन्विति – महाभारतम् (महर्षि व्यासः)

दो पद्यों की व्याख्या   6+6 = 12 अंक

तृतीय अन्विति – रामायणम् एवं महाभारतम् के निर्धारित

प्रतिपाद्य से सम्बद्ध दो प्रश्न   6+6 = 12 अंक

चतुर्थ अन्विति – निबन्ध 20 वाक्यों से अधिक का न हो।

यात्रावर्णन, उत्सववर्णन एवं जीवनचरित्र

सम्बन्धी निबन्ध पूछे जायेंगे।   12 अंक

पंचम अन्विति – अनुवाद–

(i) हिन्दी से संस्कृत में (चार वाक्य)

(ii) संस्कृत से हिन्दी में (चार वाक्य)   6+6 = 12 अंक

कुल योग – 60 अंक

संस्तुत पुस्तकें :–

1. उपाध्याय, बलदेव, (1958), *संस्कृत साहित्य का इतिहास,* वाराणसी, काशी हिन्दू विश्वविद्यालय।

2. पाण्डेय, चन्द्रशेखर, व्यास, नानूराम, (2014), *संस्कृत साहित्य की रूपरेखा,* कानपुर, साहित्य निकेतन।

3. उपाध्याय, रामजी, (1972), *संस्कृत साहित्य की रूपरेखा,* इलाहाबाद, कटरा रोड।

4. गैरोला, वाचस्पति, (1960), *संस्कृत साहित्य का इतिहास,* वाराणसी, चौखम्बा विद्या भवन।

5. व्यास, भोलाशंकर, (1965), *भारतीय साहित्य की रूपरेखा,* वाराणसी, चौखम्बा विद्या भवन।

6. शास्त्री, नेमीचन्द, (1972), *महाकवि भास,* भोपाल, हिन्दी ग्रन्थ अकादमी।

E-Resources-

•   बलदेव उपाध्याय, संस्कृत साहित्य का इतिहास
    https://archive.org/details/in.ernet.dli.2015.327677/page/n5

- संस्कृत साहित्य का इतिहास

  https://archive.org/details/SanskritSahityaKaItihas/page/n81

- ए.बी. कीथ, संस्कृत साहित्य का इतिहास

  https://archive.org/details/in.ernet.dli.2015.350163/page/n1

- वासुदेव पोद्दार, 'रामायण–महाभारत (काल, इतिहास, सिद्धान्त)'

  https://archive.org/details/RamayanaMahabharatKalItihasSiddhant
  VasudevPoddar

- साहित्य दर्पण, सत्यव्रत सिंह

  https://archive.org/details/in.ernet.dli.2015.326843

SANS 104   पुराण, स्मृति साहित्य एवं व्याकरण

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- ज्ञान के व्यावहारिक प्रयोग की क्षमता का विकास ।

- संस्कृत व्याकरण प्रयोग की योग्यता का विकास।

- साहित्यगत विषयवस्तु का तुलनात्मक विश्लेषण करने की क्षमता का विकास।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

अन्विति प्रथम   –   पुराण– श्रीमद्भागवतमहापुराण एकादश स्कन्ध का 23 वाँ अध्याय।

अन्विति द्वितीय   –   स्मृति– याज्ञवल्क्यस्मृतिः आचाराध्याय का छठा प्रकरण (स्नातक धर्म प्रकरण)।

अन्विति तृतीय   –   श्रीमद्भागवतमहापुराण एवं **याज्ञवल्क्यस्मृति** से प्रतिपाद्य सम्बन्धी प्रश्न या टिप्पणियाँ।

अन्विति चतुर्थ   –   व्याकरण (लघुसिद्धान्तकौमुदी) हल्सन्धिप्रकरण।

अन्विति पंचम   –   व्याकरण (लघुसिद्धान्तकौमुदी) विसर्ग सन्धिप्रकरण।

परीक्षा योजना

समय : 3 घण्टे   पूर्णांक : 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे हुए संकेत के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जाएँगे।

प्रथम अन्विति – पुराण (श्रीमद्भागवत महापुराणम्)
दो पद्यों की व्याख्या   6+6 = 12 अंक

द्वितीय अन्विति – स्मृति (याज्ञवल्क्यस्मृति)
दो पद्यों की व्याख्या   6+6 = 12 अंक

तृतीय अन्विति – श्रीमद्भागवतमहापुराण एवं याज्ञवल्क्य स्मृति के प्रतिपाद्य से सम्बद्ध दो प्रश्न   6+6 = 12 अंक

चतुर्थ अन्विति – सूत्र व्याख्या (एक)
प्रयोग सिद्धि (एक)   6+6 = 12 अंक

पंचम अन्विति – सूत्र व्याख्या (एक)
प्रयोग सिद्धि (एक)   6+6 = 12 अंक

कुल योग – 60 अंक

संस्तुत पुस्तकें–

1. शास्त्री, गोविन्द (1968), *श्रीमद्भागवतमहापुराण*, वाराणसी, चौखम्बा सुरभारती प्रकाशन।

2. शर्मा, कमलनयन (2004), *याज्ञवल्क्यस्मृति* (आचाराध्याय, स्नातकधर्मप्रकरण), जयपुर, जगदीश संस्कृत पुस्तकालय।

3. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. महेशसिंह कुशवाहा भाग 1 व 2 (2010), वाराणसी, चौखम्बा सुरभारती प्रकाशन।

4. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. कपिल वेद द्विवेदी (2002), संस्कृत व्याकरण एवं लघुसिद्धान्तकौमुदी, वाराणसी, विश्वविद्यालय प्रकाशन।

5. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. धरानन्द (2014), दिल्ली, मोतीलाल बनारसीदास।

6. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. सदाशिव शास्त्री (2015), वाराणसी, चौखम्बा संस्कृत सीरीज।

7. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. रामचन्द्र झा (2013), वाराणसी, चौखम्बा अमर भाती प्रकाशन।

8. वरदराज, *लघुसिद्धान्तकौमुदी,* (सन्धि भाग) व्या. विनोद कुमार झा (2013), *दिल्ली, पब्लिकेशन्स।*

E – Resources

Yagyavalkyasmrit

- https://archive.org/details/YajnavalkyaSmritiKashiSktGranthamala 178HindiTikaUmeshChandraPandeyChowkhambaSanskritSansthan/page/n1
- Bhim Shanker Rai, 'Authenticity of the Yajnavalkyasmriti'
- https://www.jstor.org/stable/44144076?Search=yes&resultItemClick=true&searchText=yajnavalkya&searchUri=%2Faction
- Dharmendra Kumar, 'Leading System in Yajnavalkyasmriti'
- https://www.jstor.org/stable/44145453?Search=yes&resultItemClick=true&searchText=yajnavalkya&searchUri=% 2Faction

तृतीय समसत्र

SANS 202 आधुनिक काव्य, व्याकरण एवं निबन्ध

Max. Marks : 100　　　　　　　　　　　　**L　T　P　C**

(CA: 40 + ESA: 60)　　　　　　　　　　　**4　0　0　4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- काव्यसर्जना के सौन्दर्यबोध एवं भाव को जाग्रत कर मौलिक अभिव्यक्ति की योग्यता का विकास ।

- भाषा–शुद्धि एवं भाषण कौशल की योग्यता का विकास।

निर्देशः–यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

अन्विति प्रथम　　– आधुनिक काव्य संग्रह–डॉ. श्रीमती वनमाला भवालकर – पाठ संख्या 1, 3

अन्विति द्वितीय　– आधुनिक काव्य संग्रह–डॉ. श्रीमती वनमाला भवालकर – पाठ संख्या 5, 7

अन्विति तृतीय　–प्रथम एवं द्वितीय अन्विति के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध प्रश्न

अन्विति चतुर्थ — व्याकरण–अजन्त शब्द लघुसिद्धान्तकौमुदी के नामिक प्रकरण से ही सूत्रों की व्याख्या एवं निम्नांकित शब्दों के रूपों की सिद्धि पूछी जायेगी –

1. अजन्त पुल्लिंग शब्द – राम, सर्व, हरि
2. अजन्त स्त्रीलिंग शब्द – रमा, मति

अन्विति पंचम — (अ) अजन्त नपुंसकलिंग शब्द–ज्ञान, दधि

(ब) लघुनिबन्ध लगभग 20 पंक्तियों का एक संस्कृत–निबन्ध परोपकारः, सत्संगति, उद्यम, विद्या, विचारात्मक अथवा विवरणात्मक विषयों पर पूछा जायेगा ।

परीक्षा योजना

समय : तीन घण्टे   पूर्णांक – 60 अंक

नोट :– यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है । प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे हुए संकेत के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

अन्विति प्रथम   — आधुनिक काव्य–

(पद्य की व्याख्या – दो)   12 अंक

अन्विति द्वितीय   — आधुनिक काव्य–

(पद्य की व्याख्या – दो)   12 अंक

अन्विति तृतीय   — प्रश्न – निर्धारित अंश के प्रतिपाद्य से सम्बद्ध प्रश्न (एक) 12 अंक

अन्विति चतुर्थ   — व्याकरण–

1. दो सूत्रों की सोदाहरण व्याख्या   – 6 अंक
2. दो पदों की सूत्र–निर्देश पूर्वक सिद्धि – 6 अंक=12 अंक

अन्विति पंचम   — खण्ड (अ) व्याकरण–

● एक सूत्र की सोदाहरण व्याख्या – 2 अंक
● एक पद की सूत्र निर्देशपूर्वक सिद्धि – 2 अंक

खण्ड (ब) लघुनिबन्ध (एक)   – 8 अंक

कुल योग–60 अंक

संस्तुत पुस्तकें–

1. भवालकर, वनमाला, (1985), इलाहबाद, *आधुनिक संस्कृत काव्यम्,* इलाहाबाद।

2. कौर, परमजीत (1991), *संस्कृत निबन्ध सुरभि*, दिल्ली, ईस्टर्न बुक लिंकर्स।

3. द्विवेदी, कपिलदेव (1985), *रचनानुवादकौमुदी*, वाराणसी, विश्वविद्यालय प्रकाशन।

4. वरदराज, *लघुसिद्धान्तकौमुदी*, भीमसेन शास्त्री (2000), दिल्ली, भैमी प्रकाशन।

5. वरदराज, *लघुसिद्धान्तकौमुदी*, *(सन्धि भाग) व्या. विनोद कुमार झा* (2013), दिल्ली, पब्लिकेशन्स।

E-Resources

https://archive.org/details/in.ernet.dli.2015.327677/page/n5

- संस्कृत साहित्य का इतिहास

  https://archive.org/details/SanskritSahityaKaItihas/page/n81

- ए.बी. कीथ, संस्कृत साहित्य का इतिहास

  https://archive.org/details/in.ernet.dli.2015.350163/page/n1

- नरेन्द्रशर्मा, 'लघुसिद्धान्त कौमुदी'

  https://archive.org/details/VaradarajaLaghusiddhantakaumudi1937/page/n1

- कपिलदेव द्विवेदी, प्रारम्भिक रचनानुवाद कौमुदी

  https://archive.org/details/PrarambhikRachanaAnuvadKaumudiKDDwivedi1978_20180228

- कपिलदेव द्विवेदी, प्रौढ रचनानुवाद कौमुदी

  https://archive.org/details/PraudhaRachanaAnuvadKaumudiKDDwivedi1955

SANS 204 प्राचीन काव्य एवं अलंकार

		L	**T**	**P**	**C**
Max. Marks : 100					
(CA: 40 + ESA: 60)		**4**	**0**	**0**	**4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- काव्योचित भाव व कल्पना सौन्दर्य सम्बन्धी योग्यता का विकास।

- अलंकारों को पहचानना।

- मूल्यों का ज्ञान।

निर्देशः—यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

अन्विति प्रथम – **किरातार्जुनीयम्** (भारवि) प्रथम सर्ग।

अन्विति द्वितीय – **श्रीमद्भगवद्गीता** (व्यास) 16 वाँ एवं 17 वाँ अध्याय।

अन्विति तृतीय – **किरातार्जुनीयम्** व **श्रीमद्भगवद्गीता** के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध प्रश्न

अन्विति चतुर्थ – **अलंकार लक्षणोदाहरण** (काव्यदीपिका अष्टम शिखा) भेदोपभेदरहित निम्नांकित 20 अलंकार ही पाठयक्रम में निर्धारित हैं– अनुप्रास, श्लेष, यमक, उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, दृष्टान्त, दीपक, व्यतिरेक, सन्देह, भ्रान्तिमान, अर्थान्तरन्यास, अपह्नुति, विभावना, विशेषोक्ति, समासोक्ति, विरोध, निदर्शना, तुल्ययोगिता।

अन्विति पंचम – **काव्य का इतिहास** – रामायण, महाभारत, महाकाव्य, गीतिकाव्य, ऐतिहासिक काव्य।

परीक्षा योजना

समय : 3 घण्टे

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे हुए संकेत के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जाएँगे।

प्रथम अन्विति	– दो पद्यों की व्याख्या	6+6 = 12 अंक
द्वितीय अन्विति	– दो पद्यों की व्याख्या	6+6 = 12 अंक
तृतीय अन्विति	– 'किरातार्जुनीयम्' व 'श्रीमद्भगवद्गीता' के निर्धारित अंश से सम्बद्ध प्रश्न (दो)	6+6 = 12 अंक
चतुर्थ अन्विति	– अलंकार (उदाहरण सहित चार)	6+6 = 12 अंक
पंचम अन्विति	– एक प्रश्न या दो टिप्पणी	6+6 = 12 अंक

कुल योग – 60 अंक

संस्तुत पुस्तकें–

1. उपाध्याय, बलदेव, (1958), *संस्कृत साहित्य का इतिहास,* काशी, हिन्दू विश्वविद्यालय, वाराणसी।

2. पाण्डेय, चन्द्रशेखर, व्यास, नानूराम, *संस्कृत साहित्य की रूपरेखा,* कानपुर, साहित्य निकेतन।

3. उपाध्याय, रामजी, (1972), *संस्कृत साहित्य की रूपरेखा,* इलाहाबाद, किताब महल।

4. गैरोला, वाचस्पति, (1960), *संस्कृत साहित्य का इतिहास,* वाराणसी, चौखम्बा विद्या भवन।

5. व्यास, भोलाशंकर, (1965), *भारतीय साहित्य की रूपरेखा,* वाराणसी, चौखम्बा विद्या भवन, वाराणसी।

6. शास्त्री, नेमिचन्द, (1972), *महाकवि भास,* भोपाल, हिन्दी ग्रन्थ अकादमी।

E- Sources-

- बलदेव उपाध्याय, *संस्कृत साहित्य का इतिहास*
  https://archive.org/details/in.ernet.dli.2015.327677/page/n5

- संस्कृत साहित्य का इतिहास
  https://archive.org/details/SanskritSahityaKaItihas/page/n81

- ए.बी. कीथ, संस्कृत साहित्य का इतिहास
  https://archive.org/details/in.ernet.dli.2015.350163/page/n1

चतुर्थ समसत्र

SANS 201 आधुनिक गद्य साहित्य एवं व्याकरण

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- गद्यशैली में सौन्दर्यबोध की मौलिक अभिव्यक्ति सम्बंधी योग्यता का विकास।

- साहित्यबोध एवं व्यावहारिक प्रयोग की योग्यता का विकास।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति   –   उपन्यास साहित्य – द्वा सुपर्णा – पूर्वार्द्ध

द्वितीय अन्विति   –   उपन्यास साहित्य – द्वा सुपर्णा – उत्तरार्द्ध

तृतीय अन्विति   –   निर्धारित उपन्यास के प्रतिपाद्य से सम्बद्ध प्रश्न

चतुर्थ अन्विति – व्याकरण – हलन्त शब्द लघुसिद्धान्तकौमुदी के नामिक प्रकरण से ही सूत्रों की व्याख्या एवं निम्नांकित शब्दों के रूपों की सिद्धि पूछी जायेगी –

1. हलन्त पुल्लिंग शब्द – युष्मद्, अस्मद्
2. हलन्त स्त्रीलिंग शब्द – अप्
3. हलन्त नपुंसकलिंग शब्द – अहन्

पंचम अन्विति – **व्याकरण – सर्वनाम शब्द**

इदम्, यद्, एतद्, अदस्, भवत्, एक, द्वि, त्रि, चतुर् – शब्दों के सभी लिंगों की रूप सिद्धि व सूत्र व्याख्या।

परीक्षा योजना

समय : तीन घण्टे   पूर्णांक – 60 अंक

नोट : यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे हुए संकेत के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

अन्विति :

(i) **उपन्यास साहित्य** – द्वा सुपर्णा – पूर्वार्द्ध

एक अवतरण का अनुवाद   – 6 अंक

एक अवतरण की व्याख्या   – 6 अंक = 12 अंक

(ii) **उपन्यास साहित्य** – द्वा सुपर्णा – उत्तरार्द्ध

एक अवतरण का अनुवाद   – 6 अंक

एक अवतरण की व्याख्या   – 6 अंक = 12 अंक

(iii) **प्रश्न** – द्वा सुपर्णा के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध सामान्य प्रश्न (एक)   = 12 अंक

(iv) **व्याकरण–हलन्त शब्द**

1. दो सूत्रों की व्याख्या   – 6 अंक
2. दो पदों की सूत्र–निर्देश पूर्वक सिद्धि   – 6 अंक

(v) **व्याकरण – सर्वनाम शब्द**

1. दो सूत्रों की व्याख्या   – 6 अंक
2. दो पदों की सूत्र–निर्देश पूर्वक सिद्धि   – 6 अंक = 12 अंक

कुल योग 60 अंक

संस्तुत पुस्तकें–

1. उपाध्याय, रामजी, (2010), *द्वासुपर्णा,* वाराणसी, चौखम्बा सुरभारती प्रकाशन।

2. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. भीमसेन शास्त्री, (2000), दिल्ली, भैमी प्रकाशन।

3. वरदराज, *लघुसिद्धान्तकौमुदी, (सन्धि भाग) व्या. विनोद कुमार झा* (2013), दिल्ली, पब्लिकेशन्स।

E-Resources

- नरेन्द्रशर्मा, *'लघुसिद्धान्त कौमुदी'*

  https://archive.org/details/VaradarajaLaghusiddhantakaumudi1937 /page/n1

- 'Glimpses of Indian heritage Varadaraja Raman V.'

  https://archive.org/details/GlimpsesOfIndianHeritageVaradarajaRa manV./page/n13

SANS 203 प्राचीन गद्य, चम्पू एवं अनुवाद

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- शुद्ध लेखन एवं पठन कौशल का विकास।
- ऐतिहासिक एवं सांस्कृतिक अवबोध।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति   –   प्राचीन गद्य, शुकनासोपदेश बाणभट्ट।

द्वितीय अन्विति –   चम्पूसाहित्य चम्पूभारतम् अनन्त भट्ट (प्रथम स्तबक, कथारम्भ – या खलुपुरा' से पाण्डव सौन्दर्य वर्णन – सोऽपि किं पंचधाऽभूत् तक)।

तृतीय अन्विति   –   शुकनासोपदेश व चम्पूभारतम् के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध प्रश्न।

चतुर्थ अन्विति   –   संस्कृत गद्य, चम्पू व कथा साहित्य का इतिहास।

पंचम अन्विति   –   अनुवाद   (i)   हिन्दी से संस्कृत में।

                               (ii)   संस्कृत से हिन्दी में।

परीक्षा योजना

समय 3 घण्टे   पूर्णांक – 60 अंक

नोट– यह प्रश्न–पत्र पाँच अन्वितियों में विभक्त है।

अन्विति

(i)   गद्यावतरण का अनुवाद (एक)

सूक्ति की व्याख्या (एक)   6+6= 12 अंक

(ii) गद्यावतरण का अनुवाद (एक)

पद्य की व्याख्या (एक)   6+6=12 अंक

(iii) शुकनासोपदेश व चम्पूभारतम् के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध प्रश्न

6+6=12 अंक

(iv) एक प्रश्न या दो टिप्पणी   6+6=12 अंक

(v)   अनुवाद

(i) हिन्दी से संस्कृत में (चार वाक्य)   6+6=12 अंक

(ii) संस्कृत से हिन्दी में। (चार वाक्य)

कुल योग 60 अंक

संस्तुत पुस्तकें–

1.   बाणभट्ट, व्या. *शुकनासोपदेश*, मोहनदेव, पंत (2015), दिल्ली, मोतीलाल बनारसीदास।

2.   अनन्त भट्ट, *चम्पूभारतम्* व्या. नारायण सूरी, *बाजीराव श्रीखण्ड*, (1915), बाम्बे, दी गुजराती प्रिंटिंग प्रेस।

E- Resources-

1.   नरेन्द्रशर्मा, 'लघुसिद्धान्त कौमुदी'
     https://archive.org/details/VaradarajaLaghusiddhantakaumudi1937
     /page/n1

2.   Glimpses of Indian heritage Varadaraja Raman V.'
     https://archive.org/details/GlimpsesOfIndianHeritageVaradarajaRa
     manV./page/n13

3.   बलदेव उपाध्याय, संस्कृत साहित्य का इतिहास
     https://archive.org/details/in.ernet.dli.2015.327677/page/n5

4.   संस्कृत साहित्य का इतिहास
     https://archive.org/details/SanskritSahityaKaItihas/page/n81

5.   ए.बी. कीथ, संस्कृत साहित्य का इतिहास

     https://archive.org/details/in.ernet.dli.2015.350163/page/n1

पंचम समसत्र

SANS 303 वैदिक साहित्य एवं निबन्ध

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

निर्गमः— पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगे।

- वैदिक छन्दों का ज्ञान।

- ऋग्वैदिक सूक्तों का अवबोध।

निर्देशः— यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति— **वैदिक साहित्य** – ऋग्वेद के निम्नांकित सूक्त पाठ्यक्रम में निर्धारित हैं – वरुण सूक्त 1.25, सूर्य सूक्त 1.115, विष्णु सूक्त 1.154।

द्वितीय अन्विति— ऋग्वेद के निम्नांकित सूक्त पाठ्यक्रम में निर्धारित हैं – इन्द्र सूक्त 2.12, उषस् सूक्त 3.61, हिरण्यगर्भ सूक्त 10.121।

तृतीय अन्विति — देवताओं के स्वरूप एवं सूक्त के प्रतिपाद्य से सम्बद्ध प्रश्न।

चतुर्थ अन्विति — वैदिक साहित्य के इतिहास की रूप रेखा, वेद, संहिता, ब्राह्मण, आरण्यक, उपनिषद् व वेदांगों के सम्बन्ध में सामान्य परिचयात्मक प्रश्न।

पंचम अन्विति — **निबन्ध—** संस्कृत भाषा, भारतीय–संस्कृति, भारतीय–समाज में नारी, प्रिय कवि आदि सामान्य विवेचनात्मक विषयों पर एक निबन्ध लगभग तीन सौ शब्दों में।

परीक्षा योजना

समय– तीन घण्टे

पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जाऐगें

अन्विति 1   निर्धारित सूक्तों में से एक मन्त्र का अनुवाद और एक व्याख्या

12 = 12 अंक

अन्विति 2   निर्धारित सूक्तों में से एक मन्त्र का अनुवाद और एक व्याख्या

6+6 = 12 अंक

| अन्विति 3 | देवताओं के स्वरूप अथवा सूक्त के प्रतिपाद्य से सम्बद्ध एक प्रश्न अथवा दो टिप्पणी | 6+6 = 12 अंक |

अन्विति 3   देवताओं के स्वरूप अथवा सूक्त के प्रतिपाद्य से सम्बद्ध एक प्रश्न
            अथवा दो टिप्पणी   6+6 = 12 अंक

अन्विति 4   वैदिक साहित्य के इतिहास से सम्बद्ध प्रश्न एक   12 अंक

अन्विति 5   संस्कृत निबन्ध (एक)   12 अंक

कुल योग = 60 अंक

संस्तुत पुस्तकें –

1. उपाध्याय, बलदेव, (1998), *वैदिक साहित्य और संस्कृति*, वाराणसी, शारदा संस्थान।

2. पाण्डेय, देवेन्द्र नाथ, (2006), *वैदिक सूक्त संग्रह*, जयपुर, जगदीश संस्कृत पुस्तकालय।

3. त्रिवेदी, रामगोविन्द, (1968) *वैदिक साहित्य का इतिहास*, वाराणसी।

4. द्विवेदी, कपिल देव (2008) '*निबंधशतकम्, वाराणसी*, विश्वविद्यालय प्रकाशन।

5. मैक्समूलर (1966) *ऋग्वेद संहिता सायण भाष्य सहित*, वाराणसी, चौखम्बा।

6. शास्त्री, हरिदत्त, कुमार कृष्ण (1988), *ऋक् सूक्तसंग्रह*, मेरठ, साहित्य भण्डार।

E- Resources-

https://archive.org/details/in.ernet.dli.2015.327677/page/n5

- संस्कृत साहित्य का इतिहास
  https://archive.org/details/SanskritSahityaKaItihas/page/n81

- ए.बी. कीथ, संस्कृत साहित्य का इतिहास
  https://archive.org/details/in.ernet.dli.2015.350163/page/n1

- बलदेव उपाध्याय, वैदिक साहित्य और संस्कृति
  https://archive.org/details/in.ernet.dli.2015.345816

षष्ठ समसत्र

SANS 304 वैदिक साहित्य, भारतीय संस्कृति एवं अनुवाद

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- ब्राह्मण, आरण्यक एवं उपनिषदों की ज्ञानसम्पदा से मौलिक चिन्तन एवं व्यावहारिक प्रयोग की क्षमता का विकास।

- सांस्कृतिक मूल्यों का विकास।

नर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति — वैदिक साहित्य – ब्राह्मण एवं आरण्यक ऐतरेय ब्राह्मण 33.3, शतपथ ब्राह्मण 1.8.1 (1 से 11 कण्डिका तक), तैत्तिरीय आरण्यक 2.10 व 6.63

द्वितीय अन्विति — बृहदारण्यकोपनिषद् 2.4, 3.8 छान्दोग्योपनिषद् 5.1

तृतीय अन्विति — ब्राह्मण, आरण्यक व उपनिषद् के पाठ्यांशों के प्रतिपाद्य से सम्बद्ध प्रश्न।

चतुर्थ अन्विति — संस्कृति और सभ्यता का तात्पर्य, संस्कृति और सभ्यता में अन्तर, भारतीय संस्कृति की विशेषताएँ :वर्णाश्रम व्यवस्था, पुरुषार्थ चतुष्टय, संस्कार।

पंचम अन्विति — अनुवाद

   (i) हिन्दी से संस्कृत में

   (ii) संस्कृत से हिन्दी में

परीक्षा योजना

समय : 3 घण्टे   पूर्णांक : 60

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जायेंगे।

अन्विति 1. निर्धारित पाठ्यांश का एक अनुवाद और एक व्याख्या

6+6 = 12 अंक

अन्विति 2. निर्धारित पाठ्यांश का एक अनुवाद और एक व्याख्या

6+6 = 12 अंक

अन्विति 3. प्रतिपाद्य से सम्बद्ध एक प्रश्न या दो टिप्पणी

अन्विति 4. एक प्रश्न या दो टिप्पणी   6+6 = 12 अंक

अन्विति 5. अनुवाद –

    (i) हिन्दी से संस्कृत –   6 अंक

    (ii) संस्कृत से हिन्दी –   6 अंक = 12 अंक

कुल योग – 60

संस्तुत पुस्तकें–

1. आप्टे, गणेश विनायक (1931). *ऐतरेय ब्राह्मण ग्रन्थ रत्नावली*, पूना, आनन्दाश्रम।

2. शास्त्री, ए. चिन्नस्वामी (2013). *शतपथ ब्राह्मण*, वाराणसी, चौखम्बा संस्कृत पुस्तकालय।

3. शास्त्री, नारायण (1935) *तैत्तिरीय ब्राह्मण*, पूना, आनन्दाश्रम।

4. झा तारिणीश (1985) *संस्कृतरचनानुवादकौमुदी*, लखनऊ।

5. संह जालिम, बाबूराम बहादुर (2010). *छान्दोग्योपनिषद्*, वाराणसी, चौखम्बा सुरभारती प्रकाशन।

6. *बृहदारण्यकोपनिषद्* (1985). गोरखपुर, गीताप्रेस।

7. *तैत्तिरीय आरण्यक* फड़के 'बाबा शास्त्री' पूना आनन्दाश्रम।

8. ऐतरेय महीदास (2006). *सायण भाष्य सहित ऐतरेय ब्राह्मण*, वाराणसी, तरा पब्लिकेशन।

9. *तैत्तिरीयारण्यकम्*, पाठक जमुना (2017). वाराणसी, आयुर्वैदिक पब्लिकेशन।

10. आप्टे, गणेश विनायक (1931). *ऐतरेय ब्राह्मण ग्रन्थ रत्नावली*, पूना, आनन्दाश्रम।

11. शास्त्री, ए. चिन्नस्वामी (2013). *शतपथ ब्राह्मण*, वाराणसी, चौखम्बा संस्कृत पुस्तकालय।

12. शास्त्री, नारायण (1935). *तैत्तिरीय, ब्राह्मण*, पूना, आनन्दाश्रम।

13. झा, तारिणीश (1985). संस्कृतरचनानुवादकौमुदी, लखनऊ।

14. सिंह, जालिम, बाबूराम, बहादुर (2010). *छान्दोग्योपनिषद्*, वाराणसी, चौखम्बा सुरभारती प्रकाशन।

15. *बृहदारण्यकोपनिषद्* (1985). गोरखपुर, गीताप्रेस।

16. *तैत्तिरीय, आरण्यक* फड़के 'बाबा शास्त्री' पूना, आनन्दाश्रम।

17. ऐतरेय, महीदास (2006). *सायण भाष्य सहित ऐतरेय ब्राह्मण*, वाराणसी, तरा पब्लिकेशन।

18. *तैत्तिरीयारण्यकम्*, जमुना पाठक (2017). वाराणसी, आयुर्वेदिक पब्लिकेशन।

E- Resources-

- राम शर्मा आचार्य, 108 उपनिषद्
  https://archive.org/details/HindiBook108UpanishadsPart1brahmaV id aKhanadaPt.ShriramSharmaAcharya

- राजवीर शास्त्री, उपनिषद भाष्य
  https://archive.org/details/UpanishadBhasya

- बलदेव उपाध्याय, संस्कृत साहित्य का इतिहास
  https://archive.org/details/in.ernet.dli.2015.327677/page/n5

- संस्कृत साहित्य का इतिहास
  https://archive.org/details/SanskritSahityaKaItihas/page/n81

- ए.बी. कीथ, संस्कृत साहित्य का इतिहास
  https://archive.org/details/in.ernet.dli.2015.350163/page/n1

चयनित अध्ययन पाठ्यक्रम समूह

SANS 301 शास्त्र साहित्य एवं व्याकरण–भाग–I

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- शुद्ध उच्चारण व पठन की योग्यता का विकास ।

- राजनैतिक मूल्यों एवं स्वास्थ्य सम्बन्धी चेतना का विकास।

- रचना कौशल का विकास।

निर्देशः–यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति – शुक्रनीति (प्रथम अध्याय–श्लोक संख्या 1–60)

द्वितीय अन्विति – **आयुर्वेदशास्त्र–कौमारभृत्यम्** (अष्टम अध्याय)दन्तोद्भेद– प्रकरण।

तृतीय अन्विति – प्रथम एवं द्वितीय अन्वितियों के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध प्रश्न

चतुर्थ अन्विति – व्याकरण –लघुसिद्धान्तकौमुदी भ्वादिगण–भू धातु।

पंचम अन्विति – व्याकरण –लघुसिद्धान्तकौमुदी भ्वादिगण–एध् धातु।

परीक्षा योजना

समय– तीन घण्टे   पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के अनुसार उचित विकल्प देते हुए प्रश्न पूछे जायेंगे।

अन्विति 1. शुक्राचार्य–शुक्रनीति

दो श्लोकों की व्याख्या   6+6 अंक = 12 अंक

अन्विति 2. आयुर्वेदशास्त्र–कौमारभृत्यम्

दो अंशों की व्याख्या   6+6 अंक = 12 अंक

अन्विति 3. प्रथम एवं द्वितीय अन्वितियों के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध

दो प्रश्न   6+6 अंक = 12 अंक

अन्विति 4. व्याकरण –लघुसिद्धान्त कौमुदी

भ्वादिगण –भू धातु

(क)– दो सूत्रों की सोदाहरण व्याख्या   6 अंक

(ख)– दो रूपों की सूत्र निर्देश सहित सिद्धि   6 अंक = 12 अंक

अन्विति 5. व्याकरण –लघुसिद्धान्त कौमुदी

भ्वादिगण –एध् धातु

(क) दो सूत्रों की सोदाहरण व्याख्या   6 अंक

(ख) दो रूपों की सूत्र निर्देश सहित सिद्धि   6 अंक = 12 अंक

                                              कुल योग = 60 अंक

संस्तुत पुस्तकें–

1. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. कान्ता भाटिया, (2017), वाराणसी, भारतीय विद्या प्रकाशन।

2. शुक्राचार्य, *शुक्रनीति,* व्या. जगदीश चन्द्र मिश्र, (2019), वाराणसी, चौखम्बा सुरभारती प्रकाशन।

3. शुक्राचार्य, *शुक्रनीति,* व्या. श्री ब्रह्मशंकर मिश्र, (1999), वाराणसी, चौखम्बा संस्कृत संस्थान।

4. त्रिवेदी, रघुवीर प्रसाद (2000), *कौमारभृत्यम्,* वाराणसी, चौखम्बा संस्कृत संस्थान।

5. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. भीमसेन शास्त्री (2007), दिल्ली, भैमी प्रकाशन।

6. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. अर्कनाथ चौधरी, (2010), जयपुर, जगदीश संस्कृत पुस्तकालय।

7. वरदराज, *लघुसिद्धान्तकौमुदी, (सन्धि भाग) व्या. विनोद कुमार झा* (2013), दिल्ली, पब्लिकेशन्स।

E- Resources-

- नरेन्द्रशर्मा, 'लघुसिद्धान्त कौमुदी'
  https://archive.org/details/VaradarajaLaghusiddhantakaumudi1937/page/n1

- , 'Glimpses of Indian heritage Varadaraja Raman V.'
  https://archive.org/details/GlimpsesOfIndianHeritageVaradarajaRamanV./page/n13

- पी.वी.काणे, 'धर्मशास्त्र का इतिहास'
  https://archive.org/details/in.ernet.dli.2015.496396/page/n5

- लघुसिद्धान्त कौमुदी– भीमसेन शास्त्री, 'लघुसिद्धान्त कौमुदी'
  https://archive.org/details/in.ernet.dli.2015.485702/page/n1

SANS 302 शास्त्र साहित्य एवं व्याकरण–भाग–II

Max. Marks : 100　　　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　　　　**4　0　0　4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- भाषा–संरचना को समझना एवं शुद्ध उच्चारण, पठन व अर्थावबोध सम्बन्धी कौशल का परिष्कार।

- व्याकरण का मौखिक एवं लेखन अभिव्यक्ति में प्रयोग।

- काव्यशास्त्र एवं नाटयशास्त्रीय तत्वों का बोध एवं उनके अनुप्रयोग की क्षमता का विकास।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति – काव्यशास्त्र–काव्यादर्श : दण्डी (प्रथम परिच्छेद–प्रारम्भ से 51वीं कारिका तक)

द्वितीय अन्विति – नाट्यशास्त्र– काव्यदीपिकाः कान्तिचन्द्र विद्यारत्न (चतुर्थ शिखा मात्र–दृश्यश्रव्यत्वभेदेन काव्यप्रभेदनम्)

तृतीय अन्विति – प्रथम एवं द्वितीय अन्वितियों के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध दो प्रश्न

चतुर्थ अन्विति – व्याकरण (आख्यात प्रकरण) – लघुसिद्धान्तकौमुदी

अदादिगण	–	अद् धातु
जुहोत्यादिगण	–	हु धातु
दिवादिगण	–	दिव् धातु
स्वादिगण	–	षुञ् धातु
तुदादिगण	–	तुद् धातु

पंचम अन्विति – व्याकरण (आख्यात प्रकरण) – लघुसिद्धान्तकौमुदी

रुधादिगण	–	रुध् धातु
तनादिगण	–	तन् धातु
क्र्यादिगण	–	क्री धातु
चुरादिगण	–	चुर् धातु

परीक्षा योजना

समय – तीन घण्टे   पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे संकेत के अनुसार प्रश्न पूछे जायेंगे।

अन्विति 1 – काव्यशास्त्र–काव्यादर्श : दण्डी–

दो कारिकाओं की व्याख्या   6+6 अंक = 12 अंक

अन्विति 2 – नाट्यशास्त्र–काव्यदीपिकाः–

दो कारिकाओं की व्याख्या   6 + 6 अंक =12 अंक

अन्विति 3 – प्रथम एवं द्वितीय अन्वितियों के निर्धारित अंश के प्रतिपाद्य से सम्बद्ध दो प्रश्न   6 + 6 अंक = 12 अंक

अन्विति 4 – व्याकरण (आख्यात प्रकरण) – लघुसिद्धान्त कौमुदी

    (क) दो सूत्रों की सोदाहरण व्याख्या   6 अंक

    (ख) दो रूपों की सूत्रनिर्देश सहित सिद्धि   6 अंक=12 अंक

अन्विति 5. व्याकरण (आख्यात प्रकरण) – लघुसिद्धान्त कौमुदी

    (क) दो सूत्रों की सोदाहरण व्याख्या   6 अंक

    (ख) दो रूपों की सूत्रनिर्देश सहित सिद्धि   6 अंक=12 अंक

कुल योग –60 अंक

संस्कृत पुस्तकें–

1. दण्डी, *काव्यादर्श*, व्या. शास्त्री रंगाचार्य रेड्डी, (1938). पूना, भण्डारकर ओरिएन्टल रिसर्च इन्स्टीट्यूट।

2. दण्डी, *काव्यादर्श*, व्या. श्रीरामचन्द्र मिश्र (2000). वाराणसी, चौखम्बा विद्याभवन।

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4. भट्टाचार्य, कान्तिचन्द्र, *काव्यदीपिका*, व्या. श्री कृष्णमणि त्रिपाठी, (2011). वाराणसी, चौखम्बा सुरभारती प्रकाशन।

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6. वरदराज, *लघुसिद्धान्तकौमुदी*, व्या. अर्कनाथ चौधरी, (2010). जयपुर, जगदीश संस्कृत पुस्तकालय।

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8. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. धरानन्द शास्त्री (2014). दिल्ली, मोतीलाल बनारसीदास।

9. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. रामचन्द्र (2013). वाराणसी चौखम्बा, अमरभारती।

10. वरदराज, *लघुसिद्धान्तकौमुदी,* व्या. सदाशिव (2010). वाराणसी, चौखम्बा, संस्कृत सीरीज।

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- बलदेव उपाध्याय, संस्कृत साहित्य का इतिहास

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  https://archive.org/details/in.ernet.dli.2015.485702/

SANS 305 भारतीय दर्शन का सामान्य परिचय

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होंगें।

- दार्शनिक चिन्तन की मूलभूत अवधारणाओं सम्बन्धी समझ का विकास।

- आध्यात्मिक चिन्तन में प्रवृत्ति का विकास।

- तार्किक विश्लेषण की क्षमता में वृद्धि।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति –   दर्शन का अर्थ एवं विशेषतायें

- दर्शन का योगदान

द्वितीय अन्विति –   प्रस्थानत्रयी का स्वरूप–
उपनिषद् साहित्य का सामान्य परिचय

तृतीय अन्विति –   ब्रह्मसूत्र एवं श्रीमद्भगवद्गीता

- ब्रह्मसूत्र का सामान्य परिचय

- श्रीमद्भगवद्गीता का सामान्य परिचय

चतुर्थ अन्विति – तर्क संग्रह

पञ्चम अन्विति – प्रतिपाद्य अंश से सम्बद्ध प्रश्न

परीक्षा योजना

समय– तीन घण्टे   पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जाएंगे।

अन्विति 1 निर्धारित अंश से सम्बद्ध एक निबंधात्मक प्रश्न   = 12 अंक

अन्विति 2 उपनिषद् साहित्य से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी

                                      6+6 = 12 अंक

अन्विति 3 ब्रह्मसूत्र एवं श्रीमद्भगवद्गीता से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी   6+6=12 अंक

अन्विति 4 तर्कसंग्रह में से दो व्याख्या   6+6 = 12 अंक

अन्विति 5 तर्कसंग्रह के प्रतिपाद्य से सम्बद्ध एक प्रश्न अथवा

दो टिप्पणी   6+6 = 12 अंक

                                 कुल योग = 60 अंक

संस्तुत पुस्तकें–

- अन्नम्भट्ट, *तर्कसंग्रह*, व्या. दयानन्द भार्गव (1971), दिल्ली, मोतीलाल बनारसीदास।

- दासगुप्त, सुरेन्द्र नाथ, (2011) *भारतीय दर्शन का इतिहास,* जयपुर, राजस्थान हिन्दी ग्रन्थ अकादमी।

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- अन्नम्भट्ट, *तर्कसंग्रह*, व्या. डा. नरेन्द्र कुमार शर्मा, (2011), जयपुर, हंसा प्रकाशन।

- त्रिपाठी, आचार्य केदारनाथ, (1985) *तर्कसंग्रह*, दिल्ली, मोतीलाल बनारसीदास।

- *ब्रह्मसूत्रशाङ्करभाष्यम्,* व्या. स्वामी श्रीहनुमानदासजी षट्शास्त्री (2010), वाराणसी, चौखम्भा विद्याभवन।

- ऋषि, उमाशंकर, (2016), *सर्वदर्शनसंग्रह*, वाराणसी, चौखम्बा, विद्याभवन।

SANS 602 प्राचीन भारतीय संस्थाएँ

Max. Marks : 100   **L   T   P   C**

(CA: 40 + ESA: 60)   **4   0   0   4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- सम्बन्धित संस्थाओं के स्वरूप एवं उनकी गतिविधियों का बोध।
- सांस्कृतिक समन्वय एवं आध्यात्मिकता का विकास ।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति – सामाजिक संस्थाएँ- प्राचीन भारतीय सामाजिक व्यवस्था, वर्णाश्रमव्यवस्था, स्त्रियों की सामाजिक स्थिति, विवाह, षोडश–संस्कारादि।

द्वितीय अन्विति – राजनैतिक संस्थाएँ- प्राचीन भारतीय राजसत्ता, राजतंत्र, राज्य आय स्रोत, शासन पद्धति, सम्पत्तिविभाजन, राज्य के सप्तांग आदि।

तृतीय अन्विति – आर्थिक संस्थाएँ - प्राचीन भारतीय अर्थ–व्यवस्था के प्रमुख पक्ष।

चतुर्थ अन्विति – न्यायिक संस्थाएँ - प्राचीन भारतीय न्याय–व्यवस्था।

पंचम अन्विति – शैक्षिक संस्थाएँ - शिक्षा स्वरूप, व्यवस्था, संस्थान, शिक्षक, शिक्षार्थी, स्त्री शिक्षा, प्राचीन भारतीय साहित्य के काल निर्धारण की समस्याएँ और उनके समाधान

परीक्षा योजना

समय– तीन घण्टे   पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जाएंगे।

अन्विति 1 निर्धारित अंश से सम्बद्ध एक निबंधात्मक प्रश्न   = 12 अंक

अन्विति 2 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी

                        6+6 = 12 अंक

अन्विति 3 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी

                        6+6 = 12 अंक

अन्विति 4 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी

6+6 = 12 अंक

अन्विति 5 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी

6+6 = 12 अंक

कुल योग = 60 अंक

संस्तुत पुस्तकें –

1. वर्मा रामचन्द्र *मनुस्मृति* (2000), नई दिल्ली, विद्या विहार।
2. कौटिल्य, *कौटिलीयम् अर्थशास्त्रम्* (व्या.) वाचस्पति गैरोला, (2009), वाराणसी, चौखम्बा विद्याभवन।
3. History of Dharamsastra, P.V. Kane
4. Indian Polity, K.P. Jayaswal
5. Political Institution in Ancient India, R.S. Sharma
6. Slavery in Ancient India, D.R. Chanana
7. Judicial Studies in Ancient India Law, Ludwig Slernbach
8. Chronology of India – C.M. Dutt
9. Ancient Indian Chronology, Sengupta
10. Chronology of India, Mankad

E-Resources

- *भारतीय जीवन और संस्कृति*, नरेन्द्र शर्मा

  https://archive.org/details/BhartiyaJivanAurSanskriti

SANS 307 आयुर्वेद एवं वनस्पति विज्ञान

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- आयुर्वेद में निहित औषधीय ज्ञान से परिचय।
- स्वास्थ्य के प्रति चेतना में वृद्धि।
- वृक्षचिकित्सा की विविध प्रविधियों का ज्ञान।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

अन्विति प्रथम – आयुर्वेद का संक्षिप्त इतिहास आयुर्वेद परिच्छेदः आचार्य परिच्छेदः

द्वितीय अन्विति – काश्यप संहिता– सूत्र स्थानम् लेहाध्यायः

तृतीय अन्विति – वृक्षायुर्वेद का संक्षिप्त इतिहास

चतुर्थ अन्विति – वृक्षायुर्वेद–सुरपाल पद्य 35 से 292 तक वृक्षारोपण हेतु भूमि चयन, वृक्षारोपण विधि, सिंचन विधि, रोग, एवं उपचार।

पंचम अन्विति – काश्यप संहिता एवं वृक्षायुर्वेद के प्रतिपाद्य से सम्बद्ध दो प्रश्न।

परीक्षा योजना

समय– तीन घण्टे

पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जाएंगे।

अन्विति 1 निर्धारित अंश से सम्बद्ध एक निबंधात्मक प्रश्न = 12 अंक

अन्विति 2 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी
6+6 = 12 अंक

अन्विति 3 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी
6+6 = 12 अंक

अन्विति 4 निर्धारित अंश से सम्बन्धित एक प्रश्न अथवा दो टिप्पणी
6+6 = 12 अंक

अन्विति 5 निर्धारित अंश से सम्बन्धित दो प्रश्न 6+6 = 12 अंक

कुल योग = 60 अंक

संस्तुत पुस्तकें–

- आयुर्वेद महाकोशः अर्थात् आयुर्वेदीय शब्दकोशः संस्कृत – संस्कृत द्वितीयः खण्डः जय कृष्णदास आयुर्वेद ग्रन्थमाला (संख्या–1)

- आचार्य, प्रियव्रत शर्मा, (1975), वाराणसी, चौखम्भा ओरियन्टालिया।

- आयुर्वेद का बृहत् इतिहास, उत्तरप्रदेश, (हिन्दी समिति ग्रन्थमाला –33) अत्रिदेव विद्यालंकार प्रकाशन।

- संस्कृत साहित्य में आयुर्वेद – सम्पादक– डॉ. मोनिका एवं डॉ. दीपमाला गहलोत (2018), जोधपुर।

- शर्मा, हेमराज, (काश्यप संहिता वृद्धाजीवकीयं तन्त्रं वा) (काशी संस्कृत ग्रन्थमाला) 154 विद्योतिनि हिन्दी व्याख्या) राजस्थानी ग्रंथागार।

- गर्ग, गोपाल शरण, *वनौषधि रत्नाकर, (चतुर्थ भाग) काश्यप संहिता* (वृद्धजीवकीयं तन्त्रम वा)

- मिश्र योगेश चन्द्र काश्यप *संहिता का सांस्कृतिक मूल्यांकन (कृष्णदास आयुर्वेद सीरीज)* (2001) ,वाराणसी, चौखम्भ कृष्णदास अकादमी।

- जुगनू, डॉ. श्रीकृष्ण, (2010), वृक्षायुर्वेदः सुरपालमुखी, वाराणसी, चौखम्भा संस्कृत सीरीज।

E-Resources-

- Aayurveda
  https://archive.org/details/in.ernet.dli.2015.170332/page/n5
- Aayurveda Siksha
  https://archive.org/details/in.ernet.dli.2015.64073/page/n19

SANS 306 वैदिक शिक्षा साहित्य

Max. Marks : 100	L T P C	
(CA: 40 + ESA: 60)	4 0 0 4	

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- वैदिक वाङ्मय में शुद्धोच्चारण की कुशलता का विकास।

- वैदिक शिक्षा साहित्य एवं उसकी उपयोगिता की समझ का विकास।

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति – वैदिक शिक्षा साहित्य का सामान्य परिचय

द्वितीय अन्विति – पाणिनीय शिक्षा

तृतीय अन्विति – याज्ञवल्क्य शिक्षा (वर्णप्रकरण)

चतुर्थ अन्विति – याज्ञवल्क्य शिक्षा– वर्णोच्चार विधि, पदाधिकार

पंचम अन्विति – सम्बन्धित प्रश्न

परीक्षा योजना

समय– तीन घण्टे   पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जाएंगे।

अन्विति 1 – निर्धारित अंश से सम्बद्ध एक निबंधात्मक प्रश्न   = 12 अंक

अन्विति 2 – पाणिनीय शिक्षा में से दो व्याख्या   6+6 = 12 अंक

अन्विति 3 – याज्ञल्क्य शिक्षा (वर्णप्रकरण) में से दो व्याख्या   6+6 = 12 अंक

अन्विति 4 – याज्ञल्क्य शिक्षा– (वर्णोच्चार विधि, पदाधिकार)

में से दो व्याख्या   6+6 = 12 अंक

अन्विति 5 – निर्धारित अंश से सम्बन्धित दो प्रश्न   6+6 = 12 अंक

कुल योग = 60 अंक

संस्तुत पुस्तकें–

- झा, नरेश, (2014), *याज्ञवल्क्यशिक्षा,* वाराणसी, चौखम्बा सुरभारती प्रकाशन।

- पाणिनी, व्या. द्विजेन्द्रनाथ मिश्र, (2011), *पाणिनीयशिक्षा,* जयपुर, हंसा प्रकाशन।

- विक्रमजीत, (2014), *वर्णोच्चारण शिक्षाशास्त्र,* जयपुर, राजस्थान हिन्दी ग्रन्थ अकादमी।

- त्रिपाठी रामप्रसाद, (1989), *शिक्षासंग्रह,* वाराणसी, सम्पूर्णानन्द संस्कृत विश्व विद्यालय।

E-Resources-

- Siksha sangrah
  https://archive.org/details/shikshasamgraha

- Paniniya Siksha
  https://sanskritdocuments.org/doc_z_misc_major_works/pANinIya shikShA.pdf

- Sanskrit Sahitya ka Itihaas
  https://archive.org/details/in.ernet.dli.2015.327677

SANS 308 संस्कृत कथा साहित्य

Max. Marks : 100　　　　　　　　　　　　　　　**L　T　P　C**
(CA: 40 + ESA: 60)　　　　　　　　　　　　　　**4　0　0　4**

निर्गमः– पाठ्यक्रम के सफलतापूर्वक अध्ययन के पश्चात् विद्यार्थी निम्नलिखित में समर्थ होगें।

- गद्यशैली में सौन्दर्यबोध की मौलिक अभिव्यक्ति की योग्यता का विकास।

- साहित्यबोध एवं व्यावहारिक प्रयोग की योग्यता का विकास।

- अध्ययन के प्रति तुलनात्मक दृष्टि का विकास

निर्देशः– यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति के लिए 12 अंक निर्धारित हैं।

प्रथम अन्विति – संस्कृत नीति कथाओं का इतिहास

द्वितीय अन्विति – संस्कृत लोक कथाओं का इतिहास

तृतीय अन्विति – पंचतंत्र – मित्रसम्प्राप्तिः, द्वितीयं तन्त्रम्

चतुर्थ अन्विति – जातकमाला –शिबि जातक, यज्ञ जातक, ब्राह्मण जातक, हंस जातक, महाबोधि जातक

पंचम अन्विति – वेतालपंचविंशतिः –द्वितीय कथा – मन्दारवती नामक कन्या के विवाह की कथा

षोडश कथा – जीमूतवाहन की कथा

द्वाविंश कथा – विष्णुस्वामी नामक ब्राह्मण पुत्र की कथा

परीक्षा योजना

समय– तीन घण्टे　　　　　　　　　　　　　　　　पूर्णांक 60 अंक

नोट : यह प्रश्नपत्र पाँच अन्वितियों में विभक्त है। प्रत्येक अन्विति अथवा उसके विभागों के साथ लिखे गये संकेत के अनुसार प्रश्न पूछे जाएंगे।

अन्विति 1 – निर्धारित अंश से संबंधित दो प्रश्न	6+6 = 12 अंक
अन्विति 2 – निर्धारित अंश से संबंधित दो प्रश्न	6+6 = 12 अंक
अन्विति 3 – निर्धारित अंश से संबंधित दो व्याख्या	6+6 = 12 अंक
अन्विति 4 – निर्धारित अंश से संबंधित दो व्याख्या	6+6 = 12 अंक
अन्विति 5 – निर्धारित अंश से संबंधित दो व्याख्या	6+6 = 12 अंक

　　　　　　　　　　　　　　　　　　　　कुल योग = 60 अंक

संस्तुत पुस्तकें—

- शर्मा, विष्णु, पंचतंत्र, अनु. सत्यकामविद्यालंकार, (), दिल्ली—6, राजपाल एण्ड सन्स, कश्मीरी गेट

- आर्यशूर, जातकमाला, अनु. जगदीश चन्द्र मिश्र (2017) वाराणसी, चौखम्बा सुरभारती प्रकाशन

- बेतालभट्टराव, वेतालपंचविंशति, संपा. दामोदर झा (2004) वाराणसी, चौखम्बा विद्याभवन

- भटनागर, श्यामा, संस्कृत कथा साहित्य का अध्ययन, (2000), जयपुर, पब्लिकेशन स्कीम

- शरीफ, मोहम्मद, संस्कृत कथा : एक अध्ययन, (1993), इलाहाबाद, इलाहाबाद विश्वविद्यालय

- कवठेकर, प्रभाकरनारायण, संस्कृत साहित्य में नीतिकथा का उद्गम एवं विकास, (1969), वाराणसी, चौखम्बा संस्कृत सीरिज

Sociology

First Semester

SOC 101 Basic Elements of Sociology

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Analyze the discipline of Sociology.
- Discuss the emergence of Sociology.
- Describe the fundamental Concepts of Sociology.

Unit 1 Sociology: Meaning, Nature and Subject Matter. Difference and Relationship of Sociology from other Social Sciences (Anthropology, Psychology, Political Science, Economics and History). Study of the Relevance of Sociology in Twenty First Century.

Unit 2 Emergence of Sociology: Intellectual and Socio-Economic Background for the Emergence of Sociology. A Brief History of Development of Sociology & Major Theoretical Perspectives.

Unit 3 Units of Social Organization: Society, Group, Community, Association and Institution: Meaning, Characteristics and Types.

Unit 4 Social Structure, Social System, Status and Role, Role Set, Norms and Values-Conformity and Deviance.

Unit 5 Culture and Cultural Processes: Culture: Meaning, Characteristics, Cultural Processes: Accommodation, Assimilation and Antagonism.

Recommended Books:

1. Alex, l. (1965). *What is sociology*. New Delhi, Prentice Hall of India.
2. Choudhary, M. (2003). *The practice of sociology*. New Delhi, Orient Longman.
3. Dube, S. (1977). *Understanding society: sociology: The discipline and its significance: Part I.* New Delhi, NCERT.
4. Giddins, A. (2001). *Sociology* (IV ed.). Cambridge, Polity Press.

5. Johnson, H. (1995). *Sociology: A systematic introduction*. New Delhi, Allied Publishers.

6. Macionis, J. (2002). *Sociology* (X ed.) New Delhi, Pearson Education.

7. Singh, J. (1999). *Sociology: concept and theories*. New Delhi, Prentice Hall of India.

Suggested E-Resources

1. Introduction to Sociology, Platform: introsocsite,

    Link: http://www.asanet.org/sites/default/files/savvy/introto sociology/Documents/CurriculumIntroSoc032709.html

2. Basics of Sociology, Platform: Zaccheus Onumba Dibiaezue Memorial Libraries' (ZODML),

    Link: https://zodml.org/sites/default/files/%5BKathy_S._Stolley %5D_The_basics_of_sociology.pdf

SOC 104 Structure of Indian Society

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Explain Indian society and culture in sociological perspective.

- Describe the concepts and features of family, kinship and marriage in India.

- Discuss the changing patterns of basic social institutions and social stratification

- Understand demographic profile of Indian society.

Unit 1 Unity and Diversity in India with Special Reference to Language, Caste, Religious Beliefs, Cultural Practices, Ethnicity. Indian Society and Culture: Characteristics

Unit 2 Marriage among Hindus, Muslims and Christians (change in objectives, form, age, mate selection and marital stability), Marriage Legislations: Hindu Marriage Act 1955, Special Marriage Act 1954

Unit 3 Family among Hindus, Muslims and Christians. Changing Structure and Functions of Family. Concept and Patterns of Kinship in Indian Society.

Unit 4 Concept of Varna, Class and Caste System in Present India, Caste & Politics.

Unit 5 Demographic and Socio-Economic Profile of India: Age and Sex Composition, Literacy, Employment, Migration & Displacement.

Recommended Books:

1. Ahuja, R. (2002). *Society in India*. Jaipur: Rawat Publication.
2. Chakraworty, K. (2002). *Family in India*. Jaipur: Rawat Publication.
3. Dube, S. (1990). *Indian society*. New Delhi, National Book Trust.
4. Mandelbaum, D. (1972). *Society in India*. Bombay: Popular Publication.
5. Sharma, R. (1981). *Indian society*. Bombay, Media Promoters.
6. Shrirama, I. (1999). *Society and culture in India*. New Delhi: Rawat Publication.
7. Singer, M., & B.S. Cohen. (2001). *Structure and change in Indian society*. New Delhi: Rawat Publication.
8. Singh, Y. (2001). *Social change in India*. New Delhi: Har Anand Publication.

Suggested E-Resources

1. Introduction to Sociology, Platform: introsocsite,

   Link:http://www.asanet.org/sites/default/files/savvy/introtosociology/Documents/CurriculumIntroSoc032709.html

2. Basics of Sociology, Platform: ZaccheusOnumbaDibiaezueMemorial Libraries' (ZODML),

   Link:https://zodml.org/sites/default/files/%5BKathy_S._Stolley%5D_The_basics_of_sociology.pd

Second Semester

SOC 102 Issues Concerning Indian Society

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Analyze the issues concerning national integration .
- Explain Familial and Social issues.
- Describe structural issues.

Unit 1 Issues Concerning National Integration: Regionalism, Communalism, Linguism, Casteism.

Unit 2 Familial Issues: Dowry, Domestic Violence, Divorce, Intergenerational Conflict.

Unit 3 Structural Issues: Poverty, Population, Unemployment in India.

Unit 4 Issues Concerning Communities: Backward Classes, Dalits, Minorities.

Unit 5 Social Issues: Corruption, Student Unrest, Consumerism, Environment.

Recommended Books:

1. Ahuja, R. (1997). *Social problems in India.* Jaipur: Rawat Publication.
2. Ahuja, R. (1998). *Violence against women*. Jaipur: Rawat Publication.
3. Becker, S. (1967). *Social problems: A modern approach.* New York: Wiley & Sons Inc.
4. Coleman, J., &Cressey, D. (1987). *Social problems*. New York: Harper & Row Publication.
5. Madan, G. (2004). *Casteism, corruption and social development in India*. New Delhi: Radha Publication.
6. Rana, S. (2004). *Environmental studies*. Meerut, Rastogi Publications.
7. Seth, C. (2000). *Communalism : A socio political study.* New Delhi: Gyan Publishing House.

Suggested E-Resources

1. Relevance of Continuity and Change in Indian Society, Platform: IGNOU,

    Link: http://egyankosh.ac.in/handle/123456789/37840

2. Unity and Diversity in India, Platform:egyankosh,

    Link:http://egyankosh.ac.in/bitstream/123456789/18835/1/Unit-1.pdf

3. Hindu Marriage Act 1955, Platform:highcourtchd.gov.in,

    Link:https://highcourtchd.gov.in/hclscc/subpages/pdf_files/4.pdf

4. Special Marriage Act 1954, Platform:legislative.gasin,

    Link:http://legislative.gov.in/actsofparliamentfromtheyear/special-marriage-act-1954

SOC 103 Social Statics and Social Dynamics

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Discuss the social institutions.
- Explain the concept of static aspect of society.
- Analyse the concept of social and cultural change.

Unit 1 Social Institutions: Education, Economy, Polity, Religion and Media.

Unit 2 Socialization : Meaning, Agents and Stages.

Social Control : Meaning, Types, Agents. Social Action: Concept, Elements of Social Action, Types of Social Action.

Unit 3 Concept of Social Interaction and Social Processes: Cooperation, Competition, Conflict.

Unit 4 Concept of Social Stratification and Social Mobility, Basis of Social Stratification: Caste, Class, Estate and Gender.

Unit 5 Social Change and Cultural Change: Meaning, Factors influencing Social and Cultural Change. Difference between Social and Cultural Change.

Recommended Books:

1. Anderson, M. & Tylor, H. (2008). *Understanding sociology*. New Delhi: Cengage Publication.

2. Eshleman, J. & Cashion, B. (1983). *Sociology: An introduction*. Boston: Little Brown & Company.

3. Giddens, A. (1997). *Sociology.* Cambridge, Polity Press.

4. Johnson, H. (1962). *Sociology: A systematic introduction*. New York, Horton, B. & Hunt, C. (1987). *Sociology*. Auckland, Mc Graw Hill.

5. Johnson, H. (1962). *Sociology: A systematic introduction*. New York: Routledge & Kegan Paul.

6. Macionis, J. (2005). *Sociology*. New Delhi: Pearson Education.

7. Mann, R. (1979). *Social structure, social change and future*. Jaipur: Rawat Publication.

8. Sharma, K. (1980). *Essays on social stratification*. Jaipur: Rawat Publication.

9. Singh, Y. (1973). *Modernization of Indian tradition*. New Delhi: Thompson.

10. Srinivas, M. (1972). *Social change in modern India*. New Delhi: Orient Longman.

Suggested E-Resources

1. Perspectives of Indian Society, Platform: Utkal University, Link: http://ddceutkal.ac.in/Syllabus/MA_SOCIOLOGY/MA_Sociology _paper_II.pdf

2. Theories of Socialization, Platform: Your Article Library, Link: http://www.yourarticlelibrary.com/sociology/4-theories-of-socialisation-explained/35088

3. Concept of Social Stratification, Platform:unibialafeld, Link:

   http://www.unibielefeld.de/soz/we/we3/Diewald/Gruskysocialkstr at.pdf

4. Socialization: Meaning, Agents and Stages, Platform:egyankosh, Link:

   http://egyankosh.ac.in/bitstream/123456789/17118/1/Unit-4.pdf

5. Social Change and Cultural Change, Platform:egyankosh, Link:

   http://egyankosh.ac.in/bitstream/123456789/17118/1/Unit-4.pdf

   https://nptel.ac.in/courses/109103023/download/Lecture%2019.pdf

   http://egyankosh.ac.in/bitstream/123456789/17118/1/Unit-4.pdf

Third Semester

SOC 203 Introduction to Rural Sociology

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Conceptualise rural Sociology and its relationship with other social sciences.
- Describe rural social structure and social processes.
- Identify the problems occurring in rural social structure.
- Critically evaluate rural development policies and programmes.

Unit 1   Rural Sociology: Meaning, Scope and Relationship with other Social Sciences. Concept of Peasant Society, Little Community, Universa- lization, Parochialization,Sanskritization.

Unit 2   Characteristics of Indian Rural Community and Types of Indian Villages. Land Tenure System, Land Reforms and their Impact on Agrarian Relationship.

Unit 3   Social Stratification in Indian Villages,Power Structure,73rd Constitution Amendment Bill,   Structure and Function of Panchayat Raj System. Women in Panchayat, Rural Leadership.

Unit 4   Peasant Movement in India since Independence :Vinobha Bhave's Bhoodan Andolan, Gramdaan, Kisan Movement (All India Kisan Mahasabha), Naxalbari Movement,Green Revolution.

Unit 5   Strategies and Schemes of the Government for Rural Development: CDP,   IRDP   and   their   Critical Evaluation.Globalization and its impact on Agriculture.Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGA), Swarnjyanti Gram Swarojgar Yojana (SGSY) Rashtriya Gram Swarojgar Yojna (RGSY).

Recommended Books:

1. Beteille, A. (1974). *Six Essays in Comparative Sociology*. New Delhi: OUP.

2. Beteille, A. (1979). *Studies in Agrarian Social Structure*. New Delhi: OUP.

3. Desai, A.R. (1997). *Rural Sociology in India*. Mumbai: Popular Prakashan.

4. Desai, V. (1988). *Rural Development-Programmes and Strategies*. New Delhi: Himalaya Publishing House.

5. Dhanagare, D.N. (1988). *Peasant Movements in India*. New Delhi: OUP.

6. Doshi, S.L., & Jain, PC. (1999). *Rural Sociology*. Jaipur: Rawat Publication.

7. Dube, S.C. (1955). *India Village.* London: Routledge and Kegan Paul.

8. Dube,S.C. (1967). *India's Changing Villages*. Mumbai: Allied Publishers Private Ltd.

9. Joshi, P.C. (1976). *Land Reforms in India*. Bombay: Allied Publishers Ltd.

10. Mukherjee, PN. (1978). *Naxalbari Movement and the Peasant Revolt in North Bengal, Centre for the Study of Social Systems*. New Delhi: Jawaharlal Nehru University. Publishing House.

11. Redfield, R. (1964). *Little Community*. Chicago: Chicago University Press.

12. Sharma, K.L. (1986). *Caste, Class and Social Movements*. Jaipur: Rawat Publication.

13. Sharma, K.L. (1997). *Rural Society in India*. Jaipur: Rawat Publication.

14. Srinivas, M.N. (1960). *India's Villages*. Bombay: Asia Publishing House.

Suggested E-Resources

1. Introduction to Rural Sociology, Platform: E-Gyankosh, Link:

   http://egyankosh.ac.in/bitstream/123456789/31744/1/Unit-1.pdf

2. Change and Development in Rural Society, Platform: NCERT, Link:

   http://ncert.nic.in/ncerts/l/lesy204.pdf

3. Peasant Movement in India since Independence Link:

   https://www.researchgate.net/publication/317425279_Peasant_Movements_in_Contemporary_India_Emerging_Forms_of_Domination_and_Resistance\

4. Globalization and its impact on Agriculture, Platform:vpmthane, Link:

   http://dspace.vpmthane.org:8080/jspui/bitstream/123456789/4189/1/FC%20Sem%202%20EFFECT%20OF%20GLOBALIZATION%20ON%20AGRICULTURE.pdf

SOC 205 Research Methods in Sociology

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Describe the steps of scientific social research.
- Explain different research designs and its importance.
- Construct and apply various tools and techniques of data collection in research.

Unit 1 Scientific Research: Characteristics, Aims, Nature and Steps of Research, Difference between Scientific and Normative Research. Variables-: Types- Nominal, Ordinal, Interval. Hypothesis: Meaning, Nature, Types, Functions, Criteria for Construction.

Unit 2 Research Design: Meaning, Function, Design for Different Type of Research, Phases in Research Design, Advantage. Sampling and Sample Design: Sampling, Population, Elements and Sampling Frame, Non- Probability Sampling: Haphazard, Accidental or Convenience, QuotaPurposive or Judgemental, Snowball Probability Sampling: Simple Random, Systematic, Stratified, Cluster.

Unit 3 Tools of Data Collection: Observation: Characteristics, Purposes, Types, Process, Problems, Advantage and Limitations. Interview: Functions, Characteristics, Types, Advantage and Limitation, Questionnaire & Interview Schedule: Format, Type of Questions, Steps, Pre-Testing, Advantage and Limitations.Case Study: Meaning, Principles, Purposes, Sources of Data Collection for Case Studies, Planning and Criticism.

Unit 4 Processing and Analysis of Quantitative Data: Coding, Classification and Tabulation, Measures of Central Tendency (Mean, Mode, Median), Dispersion.

Unit 5 Report Writing: Objectives of Preparing Report, Characteristics of a Good Report, Contents of the Report Using the Internet for Social Research, Bibliography.

Recommended Books:

1. Ahuja, R. (2001). *Research Methods.* Jaipur: Rawat Publication.
2. Babbie, E. (2001). *The Practice of Social Research*. Belmont: Wadsworth/ Thomson Learning.
3. Bailey, K D. (1987). *Methods of Social Research*. London: The Free Press.
4. Black, J. Z. & Champion, C. (1976). *Methods and Issues in Social Research*. New York: John Wiley.
5. De, VDA. (2003). *Surveys in Social Research*. New Delhi: Rawat Publication.
6. Ghosh, B. N. (1982). *Scientific Method and Social Research*. New Delhi: Sterling Publishers.
7. Goode W. J. & Hatt P. K. (1987). *Methods of Social Research*. New York: Free Press.
8. Kothari, C.R. (1990). *Research Methodology: Methods and Techniques.* New Delhi: WishwaPrakashan.
9. Kothari, D. K. (2000). *Practice of Social Research: Social Work Perspective*. Jaipur: Rawat Publication.
10. Neuman, W. L. (2007). *Social Research Methods*. New Delhi: Pearson Education.
11. Young P.V. (1956). *Scientific Survey and Research*. NJ: Prentice Hall: Englewood eliffs.

Suggested E-Resources

1. Research Methodology, Ranjeet Kumar, Platform: E-book
    Link: http://www.sociology.kpi.ua/wp-content/uploads/2014/06/Ranjit_Kumar- Research_MethodologyA_Step-by-Step_G.pdf
2. Research Methods, Platform: National Technical University Ukraine
    Link: http://www.sociology.org.uk/notes/revgrm5.pdf
3. Research Methodology Tools and Technique, Platform: euacademic.org
    Link: http://euacademic.org/BookUpload/9.pdf
4. Type of Scientific Research, Platform: university of calicut
    Link: http://www.universityofcalicut.info/SDE/Social_Research_Methods_on25Feb2016.pdf

Fourth Semester

SOC 204 Population and society

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Explain the basic concepts related to population structure and its dynamics.
- Discuss the population theories with their critical perspective.
- Analyze population policies at state and national level for social change and development.

Unit 1 Population and Society – Concept of Fertility, Mortalityand Migration. Determinants of Fertility, Mortality and Migration.

Unit 2 Population Theories – An overview of Malthusian Demographic Transition Theory, Optimum Population Theory.

Unit 3 Population and Development: Population as Constraint on and a resource for development. Socio- Cultural Factors affecting Population Growth.

Unit 4 Population Planning and Control – Reproductive and Child Health, Role of NGOs in Population Control, Population Education, Population Information.

Unit 5 Population Policy in India: Population policy –Problems and Perspectives. Population policy in Rajasthan.

New Population Policy of India- 2000. Introduction to NRHM.

Recommended Books :

1. Bose, A. (1999). *Demographic diversity of India.* Delhi: B.R. Publishing Corporation.
2. Census of India Reports.
3. Chauby, P. K. (1998). *Population policy for India – perspectives, issues and challenges*. New Delhi: Kanishka Publishers & Distributors.
4. Finkle, J. L., & C, A. M. (1994). *The new policies of population* (ed.). New York: The Population Council.
5. Hatcher, R. (1997). *The essentials of contraceptive technology*. Baltimore, John Hopkins School of Public Health.

6. Premi, M. K. (1983). *An introduction to social demography*. Delhi, Vikas Publishing House.

7. Reddy, K. (1997). *Marriage, population and society*. New Delhi, Kanishka Publishers.

8. Roy, T. K., Guruswamy, M. & Arokiasamy, P. (2001). *Population, health and development in India.* New Delhi: Allied Publishers Pvt. Ltd.

9. Sekhar, C. S. (1974). *Infant mortality, population growth and family planning in India* (Ed.). London: George Allen & Unwin Ltd.

10. Sharma, R. (1997). *Demography and population problems*. New Delhi, Atlantic Publishers.

11. Sinha, V. C., & Sinha, P. (1998). *Principles of demography*. Noida: Mayur Publishers.

12. Sinha, V.C. & Zacharia, E. (2000). *Elements of demography*. New Delhi: Allied Publishers Pvt. Ltd.

13. Srivastava, O. S. (1994). *Demography and population studies*. New Delhi: Vikas Publishing House.

Suggested E-Resources

1. An introduction to demography. Platform: Researchgate

    Link: https://www.researchgate.net/publication/318437400_Population_and_Society_An_Introduction_to_Demography

2. Population and society, Platform: NPTEL

    Link: https://nptel.ac.in/courses/109104045

SOC 206 Sociology of Change and Development

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Describe concept and theories of social change
- Analyse paradigm shift in development discourse.
- Discuss the process of social change and development in Indian Society.
- Identify conditions and barriers of social change and development.

Unit 1 Social Change: Meaning, Nature, Factors of Social Change: Economic, Cultural and Technological. Theories of Social Change: Marx, Ogburn, Sorokin.

Unit 2 Changing Conceptions of Development : Economic Development, Human Development, Social Development,Sustainable Development.

Unit 3 Perception of a Desired Society as envisaged in the Constitution of India:-Preamble, Fundamental Rights, Directive Principles of State Policy and Provisions for Weaker Sections.

Unit 4 Paths of Development: Capitalist, Socialist, Mixed Economy, Gandhian Path.

Unit 5 Indian Experience of Development: Sociological Appraisal of Five-Year Plans, New Economic Policy: Globalization, Economic Reforms, Special Economic Zones,Social Implications of Info-Tech Revolution.

Recommended Books:

1. Appadurai, A. (1997). *Modernity at large: cultural dimensions of globalization*. New Delhi: OUP.

2. Austin, G. (2000). *Working of a democratic constitution: The Indian experience.* Delhi Oxford University Press.

3. Desai, A. R. (1985). *India's path of development: A Marxist approach*. Bombay: Popular Prakashan.

4. Dreze, J. & Sen, A. (1996). *India: economic development and social opportunity*. New Delhi: OUP.

5. Giddens, A. (1996). *Global problems and ecological crisis in introduction to sociology.*IInd Edition. New York: W.W. Norton & Company.

6. Harrison, D. (1989). *The sociology of modernization and development*. New Delhi: Sage.

7. Kothari, R. (1972). *Bharat mein rajniti.* New Delhi: Orient Longmans.

8. Palmer, N. D. (1971). *The Indian political system*. Boston: Houghton Mifilion Boston.

9. Pylee, M. V. (1998). *An introduction to the constitution of India*. New Delhi: Vikas Publication.

10. Sharma, S. L. (1980). Criteria of Social Development. *Journal of Social Action*, 30 (5),

11. Sharma, S.L. (1980). *Development: cultural dimensions*. Jaipur: Rawat Publication.

12. Siwach, J. P. (1985). *Dynamics of Indian government and politics*. New Delhi: Sterling publications.

13. Srinivas, M. N. (1966). *Social change in modern India*. Berkley, University of Berkley.

14. World Bank.World Development Reports, New York.

Suggested E-Resources

1. Social Change in India, Platform: E- Gyankosh:

   Link: http://egyankosh.ac.in/handle/123456789/39799

2. Human Development, Platform: UNDP

   Link: http://hdr.undp.org/en/humandev

3. Sustainable Development, Platform: UNDP

   Link:http://www.undp.org/content/undp/en/home/sustainable-development.html

Fifth Semester

SOC 301 Masters of Sociological Thought - I

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Explain emergence and development of Sociological thought.
- Describe the contributions of classical sociological thinkers.
- Critically analyse the works of Comte, Spencer and Durkheim.

Unit 1 Socio-Economic Context of Development of Sociology:French Revolution, Industrial Revolution, Socialism. The Intellectual Context: Enlightenment.

Unit 2 Auguste Comte: Intellectual Background, Law of Three Stages, Positivism, Hierarchy of Sciences.

Unit 3 Herbert Spencer: Intellectual Background, Social Darwinism, Theory of Evolution.

Unit 4 Emil Durkheim: Intellectual Background, Social Fact:Meaning, Characteristics, Types, Rules for the Observation of Social Facts,

Rules for the Explanation of Social Facts, Division of Labor, Mechanical and Organic Solidarities,Pathological forms of Division of Labour.

Unit 5 Emil Durkheim: Suicide: Meaning, Extra Social Factors of suicide, Types of Suicide, Religion: Meaning.

Concept of Sacred and Profane, Earlier Theories of Emergence of Religion, Totemism.

Recommended Books:

1. Abraham, F. (1982). *Modern Sociological Theory*, Delhi: Oxford University Press.

2. Alpert, Harry. (1939). *Emile Durkheim and his Sociology*. New York Columbia University Press, London: P.S. King & Son, Ltd.

3. Aron Raymond (1967). *Main Currents in Sociological Thought Vol. I & II,* Harmondsworth, Middlesex, Penguin Books.

4. Bogardus, E.S. (1960). *Development of Sociological Thought*, New York: Longman's Green & Co.

5. Bottomore, T.B. (1979). *Karl Marx: Selected Writings in Sociology and Social Philosophy*, Oxford: B. Blackwell, C.

6. Chouhan B. R. *SamajshastraKePrerakStrotra*. Udaipur: A.B. Publication.

7. Cohen, P.S. (1968). *Modern Social Theory*. London: Heinemann Education Book.

8. Coser, Lewis A. (1996). *Masters of Sociological Thought*. Jaipur: Rawat Publication.

9. Ritzer George. (1996). *Sociological Theory*, Delhi: Tata McGraw Hill.

10. Shambhulal, Doshi. (1997). *Samajik Vicharak*. Jaipur: Panchsheel Prakashan.

11. Sorokin, P.A. (1956). *Contemporary Sociological Theories*. New York: Horper & Row.

Suggested E-Resources

1. Key Sociological Thinkers, Platform: Spiringer,
   Link: ttps://link.springer.com/book/10.1007/978-1-349-26616-6

2. The Founders of Sociology, Platform: CliffNotes,
   Link: https://www.cliffnotes.com/study-guides/sociology/the-sociological-perspective/the-founders-of-sociology

3. Suicide: Meaning, Extra Social factors of suicide, Types of Suicide, Platform: durtheim.uchicago.edu

   Link: http://durkheim.uchicago.edu/Summaries/suicide.html

4. Law of Three Stages, Positivism, Platform: Lander.edu

   Link: https://philosophy.lander.edu/intro/articles/comte-a.pdf

Sixth Semester

SOC 302 Masters of Sociological Thoughts –II

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Explain the intellectual background of classical sociological thinkers i.e. Karl Marx, Max Weber and Pareto
- Describe the contributions of Karl Marx, Max Weber and Pareto.
- Critically analyse the works of Karl Marx, Max Weber and Pareto.

Unit 1 Karl Marx: Intellectual Background, Materialistic Interpretation of History, Theory of Social Change, Dialectical Materialism.

Unit 2 Karl Marx: Class and Class Conflict, Surplus Value, Alienation.

Unit 3 Max Weber: Intellectual Background, Ideal Type, Bureaucracy, Concept of Class, Status and Power.

Unit 4 Max Weber: Social Action, Authority, Protestant Ethics and the Spirit of Capitalism.

Unit 5 Vilfredo Pareto: Intellectual Background, Circulation of Elites, Logico- Experimental Method, Classification of Residues and Derivation.

Recommended Books:

1. Bottomore, T. B. & Rubel, M. (1956). *Karl Marx Selected Writings in Sociology & Social Philosophy*. London: Penguin Books.

2. Coser, L. A. (1971). *Masters of Sociological Thought: Ideas in Historical and Social Context*. Houghton Mifflin Harcourt P.

3. Doshi, S. (1997). *Samajik Vicharak*. Jaipur: Panchsheel Prakashan.

4. George, R. (1983). *Sociological Theory.* Delhi: Tata McGraw Hill.

5. Sorokin, P. A. (1928). *Contemporary Sociological Theories.* New York: Horper & Row.

Suggested E-Resources

1. Key Sociological Thinkers, Platform: Springer,

    Link: https://link.springer.com/book/10.1007/978-1-349-26616-6

2. The Sociology of Law of Marx, Weber, and Durkheim, Platform: Bitstream,

    Link: http://m.library2.smu.ca/bitstream/handle/01/26291/Kay_Austin_Honours_2015.pdf?sequence=1&isAllowed=y

3. Karl Marx: Materialistic Interpretation of History. Dialectical Materialism, Platform:rnarxist.org,

    Link: https://www.marxists.org/archive/shibdas-ghosh/1964/06/26.htm

4. Vilfredo Pareto: Intellectual Background

    http://www.newworldencyclopedia.org/entry/Vilfredo_Pareto

Discipline Electives

SOC 303 Social Anthropology

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Explain meaning and scope of Social Anthropology.
- Explain social institutions, culture and tribe.
- Describe the economic and political organizations in tribal society.

Unit 1 Social Anthropology-Meaning, Perspective Scope and Relationship with other Social Science. (Sociology, History, Political Science, Economics).

Unit 2 Culture: Meaning, Definition, Characteristics, Theories of Cultural Growth : Evolutionist & Diffusionist School.

Unit 3 Marriage: Concept, Forms. Family: Concept, Types and Theories of Origin of Family.

Kinship: Concept, Types, Kinship terms.Role of Dormitories in Kinship Organization.

Unit 4 Tribe : Definition and Concept; Tribe, Race and Caste. Religion and Magic : Concepts, Differences.

Unit 5 Economic Organization: Meaning, Characteristics and Functioning. Political Organization: Role of Tribal Chief, Justice and Law.

Problems Faced by Indian Tribes: Poverty, Education, Displacement and Rehabilitation.

Recommended Books:

1. Beals R.L. &Hoijer, H. (1971). *An Introduction to Anthropology*, New York: McMillan Co.

2. Dube S.C. (1977). *Tribal Heritage of India*, Vikas Publications.

3. Evans Pritchard, E.E. (1966). *Samajik Manav Vigyan*, Delhi: Rajkamal Prakashan.

4. Evans, P. (1967). *Social Anthropology*. London: Cohen Shest Ltd.

5. Haimendort Van Furer. (1982). *Tribes of India: The Struggle for survival*, Delhi: Oxford Univ. Press.

6. Harris Marvin. (1968). *Rise of Anthropological Theory*, London, Routledge & Kegan Paul, 1968.

7. Herskovits Melville J. (1969). *Cultural Anthropology*, New Delhi: Oxford & IBH Pub. Co.

8. Hoebel E.A. (1949). *Man in Primitive World*. New York: McGram Hill.

9. Kothari K.L. (1985). *Tribal Social Change in India*. Delhi: Himanshu Publication.

10. Kroeber (1948). *Anthropology*. New York: Harcourt Bruce & Company.

11. Leach Edmund (1982) *Social Anthropology*. New York: Oxford Univ. Press.

12. Majumdar D.N. & Madan, T.N (1957). *An Introduction to Social Anthropology*. Bombay: Asia Publishing House.

13. Mann R.S. (1993). *Culture and Integration of Indian Tribes*. New Delhi: M.D. Pub.

14. डी. एन. मजूमदार एवं टी. एन. मदान, परिचय : सामाजिक मानव शास्त्र, नेशनल पब्लिकेशन हाऊस, 1975

15. Nadel S.F. (1963). *Foundation of Social Anthropology*. London: Cohen & West.

Suggested E-Resources

1. Social Anthropology and the Study of historical societies, Platform: The Economic Weekly,

   Link: https://www.epw.in/system/files/pdf/1959_11/28-29-30/ social_anthropologyand_the_study_of_historical_societies.pdf

2. An Introduction to Anthropology, Platform: Wiley Online Library, Link: https://anthrosource.onlinelibrary.wiley.com/doi/pdf/10.1525 /aa.1931.33.1.02a00170

3. Marriage concept and Forms,

   Link: http://content.inflibnet.ac.in/data-server/eacharya-documents /5717528c8ae36ce69422587d_INFIEP_304/72/ET/304-72-ET- V1-S1__file1.pdf

4. Tribe: Definitionand Concept Tribe, Platform: india environment

   Link: http://www.indiaenvironmentportal.org.in/files/Concept%20 of%20tribe.pdf

SOC 305 Sociology of Mass Communication

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Define the concept of Communication and mass communication.
- Analyse the various theories of mass media.
- Discuss the role of mass media.
- Explain the functions and Dysfunctions of mass media.

Unit 1 Communication: Meaning, Elements and Importance Types of Communication: Interpersonal Communication, Group Communication and Mass Communication. Elements of Mass Communication. Mass Media; Meaning and Classification.

Unit 2 Growth and Role of the Media in India in the Colonial and the Post-Colonial Period- Press, Cinema, Radio, Television.

Unit 3   Two Step Theory: Katz and Lazarsfeld, Marxian Theory, Developmental Theory, Responsibility Theory.

Unit 4   Role of Media in Society: Socialization: Study of Fastenger,(Schramm, Lyle and Park) and Gerson. Recreation: Study of Berouni and Piggorlo and Dallas. Information: Study of Almand and Pawell Education: Study of Meclosky, Rangaswamy and Durtington.

Unit 5   Function and Dysfunction of Mass Communication (View of Lasswell, Lazarsfeld and Merton, Defleur, Willbur Schramm and Peterson). Globalization, the Growth of New Technology and Communication.

Recommended Books:

1. Bathla, S. 1998. *Women, democracy and the media: Cultural and political representations in the Indian press*. Sage.

2. Klapper, J. T. 1949. *The effects of mass Communication.* Glenco: Free Press.

3. Kumar, K. J. 2000. *Mass communication in India* (Vol. 741). Jaico publishing house.

4. Majumdar, D. N. 1958. *Caste and communication in an Indian village*. Delhi: Asia Publishing House.

5. Nagori, M. 2003. *Jan Sanchar EvamSamaj*. Udaipur. Ankur Prakashan.

6. Wright, C. R. 1959. *Mass communication: A sociological perspective*. New York, Randam House.

Suggested E-Resources

1. Mass Media and Society, Platform: University of Calicut, Link:http://www.universityofcalicut.info/SDE/VISem_sociology_s ociology_of_mass_communication.pdf

   http://ioc.edu.my/images/demo/printedMaterial/OUMH1203.pdf

2. The Sociology of Mass Media, Platform: Research Gate, Link: Link: https://www.researchgate.net/publication/320285914_The _Sociology_of_Mass_Media

3. Communication: Meaning, Elements, Platform: ioc.edu, Link:http://ioc.edu.my/images/demo/printedMaterial/OUMH1203. pdf

4. Mass Communication, Elements of Mass Communication, Mass Media- Meaning and Classification, Platform: universtiy of calicut.

Link: http://www.universityofcalicut.info/SDE/SMMassCommunication.pdf

5. Two Step Theory: Katz and Lazarsfeld, platform: ancacidyelasite

Link: http://ancacid.yolasite.com/resources/05.101%20%20ISI%20%20e-F%C3%B3lio%20A%20-%20Enunciado%20%20Texto%20-%206446504-Lazarsfeld-Theory.pdf

SOC 307 Sociology of Gender

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Comprehend the basic ideas of Gender and Society in context to the Indian society.
- Explore the different facets of gender and how it assists in shaping the identity of women.
- Learn about the social structures of the Indian society and acquaint with important social institutions.
- Become aware of various issues of women and will be able to examine the differing ways in which gender inequality and discrimination against women persist.

Unit I   Basic concepts of Sex and Gender, Gender and Socialization, Gender Stereotypes, Femininity and masculinity.

Unit II Gender and society: Stratification based on gender, Patriarchy, Gender and Body politics, Gender Discrimination.

Unit III Gender and its sociological implications: Gender and Development perspectives, Sexual division of labour, Gender-based violence, Gender and portrayal of women in media.

Unit IV Feminism: Meaning and emergence of feminist movements, First wave, Second wave and Third wave of feminism, World Conferences on Women and women's rights.

Unit V Feminism and its theoretical perspectives: Liberal, Marxist and Radical feminism, Contribution of eminent feminists - Simone De Beauvoir and Vina Majumdar.

Recommended Books:

1. Menon, N. (ed.). (1999). *Gender and politics in India.* Delhi: Oxford University Press.

2. Giddens, A. (1984). *The constitution ofsSociety: Outline of the theory of structuration.* Berkeley: University of California Press.

3. Tong, R. (1989). *Feminist thought: A comprehensive introduction.* USA: Westview Press.

4. Kimmel, M.S. (2004). *The gendered society,* 2nd Ed. New York: Oxford University Press.

5. Menon, N. (2012). *Seeing like a feminist.* UK: Penguin.

6. Forbes, G. (1999). *Women in modern India.* Cambridge: Cambridge University Press.

7. Das, V. (1994). *'Modernity and biography: Women's lives in contemporary India',* in Thesis Eleven. 39: 52-62.

8. Connell, R.W. and Messerschmidt, J.W. (2005). Hegemonic masculinity: Rethinking the concept, in *Gender and Society.* 19: 829-859.

9. Prasad, K. (Ed.). (2005). Women and media: Challenging feminist discourse. New Delhi: The Women Press.

10. Desai, N., & Thakkar, U. (2004). *Women in Indian society*. Delhi: National Book Trust.

Suggested E-Resources

1. Gender and concepts

   http://www.iwtc.org/ideas/15_definitions.pdf

2. Gender and media

   http://www.care.org/newsroom/publications/whitepapers/woman_and_empowerment.pdf

3. http://www.udel.edu/comm245/readings/Genderedmedia.pdf

4. Gender discrimination

   http://mpra.ub.uni-muenchen.de/10901/1/sivkumar-gender-discrimination.pdf

5. Gender and decision-making

http://www.ijpsy.com/volumen7/num3/176/factors-that-affect-decision-making-gender-EN.pdf

6. Feminist movements

https://www.vox.com/2018/3/20/16955588/fminism-waves-explained-first-second-thirdfourth

SOC 308 Sociology of Social Movements

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Learning Outcomes: After the completion of the course, the students will be able to:

- Demonstrate awareness of social movements on a state, national, and global level .
- Distinguish between different types of social movements.
- Describe how social movements are organized and institutionalized over time.
- Describe how social movements impact our political and economic systems as well as our global world.

Unit I   Social movements: Definition and characteristics, structure of social movements, leadership, ideology and organization. Functions of social movement in society.

Unit II   Types of Social movements: Reformative, Resistance, Protest and Revolutionary.

Unit III Social movement & social change: inter-relationship.

Tribal movement: Birsa munda & santhal movement.

Peasant movement: Tebhaga & Telangana movement.

Unit IV Religious movement: Arya Samaj, Brahma Samaj, Prathana Samaj, Ram Krishna Mission

Unit V   New Social movement: Backward class movements, Women's movement, Environmental movement, Transgender movements.

Recommended Books:

1. Desai, A.R.ed. (1979). *Peasant Struggles in India*. Bombay: Oxford University Press.

2. Dhanagare, D.N.(1983). *Peasant Movement in Indian 1920-1950.* New Delhi: Oxford University Press.

3. Gore, M.S.(1983). *The Social context of an Ideology: Amebedkar's Political and Social Thoughts*. New Delhi: Sage.

4. Rao, M.S.A. (1979). *Social Movement and Social Transformation*. Delhi: Macmillan.

5. Singh K.S. (1982). *Tribial Movements in India*. New Delhi: Manohar.

6. Banerjee, Prathama (2006). *Polities of Time Primitives' and History –Writing in a Colonial Society*. New York : Oxford University Press.

7. Oomen, T.K. (1990). *Protest and change: Studies in social Movement*. New Delhi: Sage.

8. Ponna, W. ed (1993). *New Social Movement in the South: Empowering the People*. New Delhi: Vistaar.

9. Shah, G. (1990). *Social movements in India: A review of the literature*. New Delhi: Sage.

10. Sen, S. (1999). *Women and labour in late colonial India: The Bengal jute industry*. Cambridge: Cambridge University Press.

Suggested E-Resources:

1. Social Movments in India

   http://ncert.nic.in/ncerts/l/lesy208.pdf

2. Social Movments and social Change

   https://opentextbc.ca/introductiontosociologychapter/chapter21-social-movements-andsocial-change/

3. Social Movments in India

   https://archive.org/details/SocialMovements India-English-GhanshyamShah

SOC 309 Economic Sociology

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	4	0	0	4

Learning Outcomes: After the completion of the course, the students will be able to:

- Describe the basic concepts and perspectives of Economic Sociology.

- Explain processes of production in different social formations in sociological perspective.
- Discuss the emerging perspectives in economic sociology.
- Critically analyse the interconnectedness of economy and society in the areas of development and globalization in contemporary era.

Unit I Basic Concepts: Economy, Society, Value, Labour, Property, Money, Rationality.

Unit II Perspectives in Economic Sociology: Formalism, Substantivism, New Economic Sociology.

Unit III Forms of Exchange- Reciprocity and Gift, Exchange and Money.

Systems of Production and Consumption: Hunting and Gathering, Domestic Mode of Production, Peasant - the Indian scenario; Land revenue systems; Land reforms.

Unit IV Systems of Production and Consumption: Capitalism- State, Market and Society, Socialism- State, Production and Distribution, Mixed Economy.

Unit V Embeddedness of Economy and Social Structure, Some Contemporary Issues in Economic Sociology-Growth and Development, Globalization.

Recommended Books:

1. Weber, Max. (1978) *Economy and society*.(Ed. by Roth and Wittich). Berkley: California Press.
2. Weber, Max. (1999) *Essays in economic sociology*. (ed. by Swedberg). Princeton: Princeton University Press.
3. Hann, C. and Keith, H. (2011). *Economic anthropology*. Cambridge, UK: Polity Press.
4. Karl, P. (1977). *The livelihood of man*. New York: Academic Press.
5. Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, Vol.91, No.3 (Nov), pp. 481 ‑ 507.
6. Mauss, M. (1924).*The gift: Forms and functions of exchange in archaic societies*. London: Cohen and West,
7. Carrier, J. G. (1995). *Gifts and commodities*, London: Routledge.
8. Zelizer, V. A. (1989). ―The Social meaning of money: Special monies. *American Journal of Sociology*, Vol.95. (Sept.) pp. 342-377.
9. Sahlins, M. (1974). *Stone age economics*. London: Tavistock.
10. Wolf, E. R. (1966). *Peasants*. New Jersey:Prentice Hall.
11. Bottomore, T. (2010). *Theories of modern capitalism*. New York: Routeledge.

12. Verdery, K. (1996).*What was socialism, and what comes next?*. Princeton, N.J.: Princeton University Press.
13. Appu, P. S. (1996). *Land reforms in India*, New Delhi: Vikas Publishing House.
14. Harrison, D. (1988). *Sociology of modernisation and development*. London: Unwin Hyman
15. Sen, S. (2007). *Globalization and development*. New Delhi: National Book Trust.

Suggested E-Resources:

- The handbook of economic sociology by Neil J. Smelser and Richard Swedberg. Platform: edisciplinas.usp, Link:
- https://edisciplinas.usp.br/pluginfile.php/1000207/mod_resource /content/1/%5BNeil_J._Smelser%2C_Richard_Swedberg%5D_ The_Handbook_Economic%20sociology.pdf
- Understanding Economic in New Economic Sociology by Jan Sparsam Platform: econsoc.mpifg, Link:
- http://econsoc.mpifg.de/downloads/18_1/Sparsam_18-1.pdf
- Major Traditions of Economic Sociology by Richard Swedberg Platform: jstor, Link: https://www.jstor.org/stable/2083343?seq=1#metadata_info_tab_c ontents
- The Historical Conflict of Socialism and Capitalism, and The Post-Socialist Transformation By UNCTAD Platform: UNCTAD, Link:
- https://unctad.org/en/Docs/ux_tdxrt1d3.en.pdf

Statistics

First Semester

STAT 106 Probability and Descriptive Statistics

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After the completion of the course, the students will be able to:

- differentiate between the two definitions of Statistics
- understand and differentiate between population and sample, variables and attributes in any survey
- chose between the type of survey, census or sample, and the method of data collection, primary and secondary methods for a study,
- represent the data using suitable tabular and/or graphical method
- identify and calculate appropriate summary statistics for the data
- understand the concept of various definitions of probability and calculate probability for any given problem.
- define a random variable for a study variable and obtain its properties.

Unit 1 Definition, Scope and limitations of Statistics, Concept of Statistical population. Attributes and variables. Types of data, Collection of primary and secondary data. Sample and census survey - their advantages and disadvantages. Types of Sampling and Non-Sampling errors. Classification and Tabulation of data.

Unit 2 Graphical and diagrammatic representation of data. Measures of central tendency. Measures of dispersion. Moments, Measures of skewness and kurtosis. Sheppared's correction (without proof) for moments. Charlier check.

Unit 3 Probability: Random experiment, Sample space, events, Combination of two or more events, Basic concept of probability. Classical, Empirical and Axiomatic approach to probability. Marginal, Joint and Conditional probability, Addition and Multiplication theorems of probability, Baye's theorem and its simple applications.

Unit 4 Random variable: Discrete, Continuous, Univariate and Bivariate. Probability mass function and Probability density functions, Distribution function, Conditional and Marginal distributions. Independence of random variables.

Unit 5 Mathematical Expectation: Expectation of sum and product of random variables. Variance and Covariance, Conditional expectation. Moments and Moment generating function, Characteristic function (definition and statement of properties only) Cumulant generating function, Relation between moments and cumulants.

Note: Use of scientific calculator is permissible

Text Books:

1. Goon, A. M., Gupta, M. K., & Dasgupta, B. (1968). *Fundamentals of Statistics: Vol.: 1*. Calcutta: The World Press Private Ltd.

2. Meyer, P. L. (1970). *Introductory probability and statistical applications*. Reading, Mass: Addison-Wesley Pub. Co.

Reference Books:

1. Mood, A. M., Boes, D. C. & Graybill, F. A. (1974). *Introduction to the theory of statistics*. East Windsor, NJ: McGraw-Hill, Inc.

2. Srinivasan, S. K. & Mehata, K. M. (1988). *Probability and random processes*. New Delhi: Tata McGraw-Hill.

3. Johnson, R. A., Miller, I. & Freund, J. E. (2011). *Miller & Freund's probability and statistics for engineers*. Boston: Prentice Hall.

4. Feller, W. (1968). *An introduction to probability theory and its applications: V. 1*. New York: Wiley.

5. Gupta, S. C. & Kapoor, V. K. (2000). *Fundamentals of mathematical statistics: A modern approach*. New Delhi: Sultan Chand.

6. Gupta, S. P. (2014). *Statistical Methods*. New Delhi: Sultan Chand and Sons.

Suggested E-learning material:

1. Video lectures on Probability and Statistics:
   https://nptel.ac.in/courses/111105090/

2. Video lectures on Introduction to Data Analytics:
   https://nptel.ac.in/courses/110106072/

STAT 106L Probability and Descriptive Statistics Lab

Max. Marks : 100
(CA: 40 + ESA: 60)

L T P C
0 0 4 2

Learning Outcomes: After the completion of the course, the students will be able to:

- Represent data sets using some diagrams and graphs.
- Express raw data in terms of frequency table by using exclusive and inclusive method of classification for continuous/discrete variable.
- Apply and justify the use of, various graphical representations such as Histogram, Frequency polygon etc.
- Interpret and analyze the data using various averages such as arithmetic Mean, Median and Mode.
- Compare different data sets using methods such as standard deviation, mean deviation, quartile deviation and coefficient of variation.
- Employ and interpret the measures of Skewness and Kurtosis.

1. Preparation of frequency table by using exclusive and inclusive method of classification for continuous/discrete variable.
2. Tabulation of data.
3. Graphical representation of data by:
   (i) Histogram
   (ii) Frequency polygon
   (iii) Frequency Curve
   (iv) Ogives
4. Diagrammatic representation of data by:
   Simple Bar, Sub-divided Bar and Multiple Bar diagrams.Squares, Circles and Pie-diagrams.
5. Determination of Mean, Median, Mode, G.M., H.M., Quartiles, Deciles and Percentiles.
6. Computation of Range, Standard deviation, Mean deviation, Quartile deviation and Coefficient of variation.
7. Combined mean and combined standard deviation.

8. Computation of first four moments, Measures of Skewness and Kurtosis.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus may be set in the practical examination.

   (ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

   (iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

Second Semster

STAT 109 Measures of Association and Probability Distributions

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: On completion of the course, students will be able to:

*   Find association between two attributes/variables.
*   Fit the linear regression equation for real data sets arising in various fields of the populations.
*   Understand the concept of multiple and partial correlation.
*   Apply selected probability distributions to solve problems.
*   Fit the Binomial, Poisson and Normal distribution for real life data.

Unit 1 Theory of Attributes: Classes and class frequencies, Consistency of data. Independence of attributes, Contingency table. Association of attributes, Measures of association. Curve fitting by the principle of least squares. Fitting of straight line, parabola, power curves and exponential curve.

Unit 2 Bivariate distributions, Correlation and Regression, Pearson's correlation coefficient, Lines of Regression and Regression coefficient, Rank Correlation and Spearman's rank Correlation coefficient. Partial and multiple Correlation for three variables only.

Unit 3 Binomial, Poisson, & Negative Binomial distributions, Limiting cases of Binomial and Poisson distributions, Fittings of Binomial and Poisson distributions.

Unit 4 Geometric, Multinomial and Hypergeometric distribution with simple properties and applications. Normal distribution with its properties & fitting.

Unit 5 Rectangular, Exponential, Gamma, Beta, Laplace and Cauchy with simple properties and applications.

NOTE: Use of scientific calculator is permissible.

Books Recommended:

1. Goon, A. M., Gupta, M. K., & Gupta, B.D. (2001). *Fundamental of Statistics*. (Volume I). Kolkata, The World Press Pvt. Ltd.

2. Gupta, S. C., & Kapoor, V. K. (2002). *Fundamental of Mathematical Statistics*. (11th ed.). Sultan Chand & Sons.

3. Gupta, S. P. (2010). *Statistical Methods* (39th ed.). New Delhi, Himalaya Publication.

4. Mood, A. M., Graybill, F. A., & Boes, D. C. (2001). *Introduction to the theory of Statistics.* (3rd ed.). Tata McGraw Hill.

5. Meyer, P. L. (1970). *Introductory probability and Statistical Applications.* (2nd ed.) Oxford & IBH Publishing Co. Pvt. Ltd.

Suggested E-learning material:

4. Probability and Random variables. MIT Open Course.

   https://ocw.mit.edu/courses/mathematics/18-440-probability-and-random-variables-spring-2014/lecture-notes/

5. Probability and Statistics, NPTEL.

   https://nptel.ac.in/courses/111105041/27

STAT 109L Measures of Association and Probability Distributions Lab

Max. Marks : 100

(CA: 40 + ESA: 60)

L	T	P	C
0	0	4	2

Learning Outcomes: After the completion of the course, the students will be able to:

- Apply and use fitting of various curves such as Straight line, parabola, exponential curve etc.

- Effectively distinguish between and compute, correlation and rank correlation, Partial and Multiple correlations.

- Understand and perform the Fitting of Binomial, Poisson and Normal distribution

1. Fitting of the following curves by the method of least squares:
   (i) Straight line   (ii)   Parabola
   (iii) Exponential Curve (iv)   Power Curve
2. Computation of coefficients of correlation and rank correlation.
3. Fitting of regression lines.
4. Computation of Partial and Multiple Correlation
5. Testing of independence of attributes.
6. Yule's coefficient of association for attributes.
7. Fitting of (i) Binomial, (ii) Poisson and (iii) Normal distribution.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus may be set in the practical examination.

(ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

(iii) Where it is feasible practical practice should be done through spreadsheet.

Third Semster

STAT 209 Sampling Distributions

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: On completion of the course, the students will be able to:

- Understand the difference between probability distribution and sampling distribution.

- Understand the sampling distribution of the mean of a sample from a Normal Population.

- Understand the properties of the sampling distribution of the sample mean in general situations, using the Central Limit Theorem.

- Understand the concepts of the t, F and χ^2 distributions and theirapplications on real life situations

Unit 1 Limit laws: convergence in probability, almost sure convergence, convergence in mean square and convergence in distribution and their inter relations, Chebyshev's inequality, W.L.L.N., S.L.L.N. and their applications, De-Moivre Laplace theorem, Central Limit Theorem (C.L.T.) for i.i.d. variates, applications of C.L.T. and Liapunov Theorem (without proof).

Unit 2 Basic concept of Sampling and sampling distribution, sampling distribution of sample mean for Binomial, Poisson and Normal populations, standard errors of sample mean, sample variance and sample proportion. Null and alternative hypotheses, level of significance, Type I and Type II errors, their probabilities and critical region. Concept of p-values.

Unit 3 Large sample tests of significance: Sampling for attributes and variables, Tests of significance and confidence intervals for proportion, difference of two proportions, single mean, difference of two means, standard deviation and difference of standard deviations.

Unit 4 Chi-square distribution with its moment generating function, moments and cumulant, Additive property of chi-square variates, Limiting case of chi-square distribution. Tests of significance and confidence intervals based on Chi- Square distribution. Yates Correction for 2x2 contingency table.

Unit 5 Students 't' and Fishers 't' statistics and their distributions Application of 't' test for one sample and two sample problems and for testing the significance of a sample, Correlation coefficient Paired 't' test, F-statistic and its distribution. Application of F-test for testing the equality of variance, Fisher's transformation and its uses. Relationship between 't' and 'F' statistics and F and Chi-square statistics

Note: Use of scientific calculator is permissible.

Text Books:

1. Hogg, R. V., & Tanis, E. (2009). *Probability and Statistical Inference.* Prentice Hall.

2. Goon, A. M., Gupta, B. D. & M. K. Gupta.(1968). *Fundamental of Statistics.* (Vol. I).The World Press Pvt. Ltd. Kolkata.

Reference Books:

1. Mood, A. M., Graybill, F. A., & Boes, D. C. (1974). *Introduction to Theory of Statistics*. McGraw- Hill International.

2. Gupta, S. C., & Kapoor, V. K. (2013). *Fundamental of Mathematical Statistics* (11[th]ed.). New Delhi: Sultan Chand Publication.

3. Gupta, S.P. (2014). *Statistical Methods* (44th. ed.). Sultan Chand & Sons.

4. Freund, J. E. (2004). *Modern Elementary Statistics* (12th. ed.). New Jersey: Pearson Prentice Hall.

Suggested E-learning material:

1. Sampling distribution and central limit; Platform: Colorado State University
https://www.stat.colostate.edu//~vollmer/stat307pdfs/LN5_2017.pdf

STAT 209L Sampling Distributions Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: On completion of the course, the students will be able to:

- Compute and understand testing of significance and confidence intervals for Single mean, Standard deviation/variance and proportion in the context of large as well as small samples effectively
- Formulate and draw valid conclusion for testingequality of two
  — Means
  — Standard deviations/variances
  — Proportions
  in the context oflarge as well as small samples.

- Understand and establish the test for goodness of fit and independence of attributes.

List of Practicals

1. Testing of significance and confidence intervals for single proportion and difference of two proportions for large sample.

2. Testing of significance and confidence intervals for single mean and difference of two means for large sample.

3. Testing of significance and confidence for mean and difference of means (paired and unpaired cases) and for correlation coefficient

4. Testing of significance and confidence intervals for difference of two standard deviations.

5. Testing if the population variance has a specific value and its confidence intervals.

6. Testing of goodness of fit.

7. Testing of independence of attributes.

8. Testing based on 2 X 2 contingency table without and with Yates' corrections.

9. Testing of significance and confidence intervals of an observed sample correlation coefficient.

10. Testing and confidence intervals of equality of two population variances

Note: (i) The above list is only for the guidance of the students.

(ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practical.

(iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

Fourth Semster

STAT 207 Statistical Inference and Quality Control

		L	T	P	C
Max. Marks : 100		**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)		**6**	**0**	**0**	**6**

Learning Outcomes: On completion of this course the students will be able to:

- Understand the concept of statistical inference and criteria for a good estimator.
- Apply various basic parametric, non-parametric and sequential estimation techniques and testing procedures on the real life problems.
- Understand the concept of confidence interval,Neyman-Pearson fundamental lemma, MP test, UMP test, etc.

- Understand the concepts of quality control, control charts, SPRT, OC and ASN function.
- Understand the non-parametric techniques such as sign, median and run test and the problems based on these tests.

Unit 1 Theory of Estimation – Problems of point estimation, Properties of a good point estimator–Unbiasedness, Consistency, Efficiency & Sufficiency, Minimum variance unbiased estimator, Factorization theorems (without proof) and its applications. Confidence interval for normal case and Confidence coefficient.

Unit 2 Methods of Estimation: Method of maximum likelihood, Minimum variance, Moments, Least squares and minimum Chi-square with their properties (Statements only).

Unit 3 Testing of Hypothesis: Simple and Composite Hypothesis, Null and Alternative Hypothesis, First and Second types of errors, Power and size of the test, Level of significance, Critical region and best critical region, Neyman- Pearson lemma and its application for finding BCR.

Sequential test procedure, Sequential probability ratio test (Properties are excluded), OC and ASN functions (simple ideas only).

Unit 4 Order Statistics- Definition and their distribution, Distribution of sample range and sample median for continuous variable only (Confidence intervals and quartiles are excluded).

Non parametric tests; Sign Median and Run tests for small and large samples.

Unit 5 Statistical Quality Control: Process control, Control charts for *X,* R, s, p and c and their uses. Sampling plan: Acceptance sampling for attributes, Single and Double sampling inspection plans, Concept of OC, ASN, AOQ and AOQL.

Note: Use of scientific calculator is permissible.

Suggested Text Books:

1. Mood, A. M., Graybill, F. A., & Boes, D. C. (1974). Introduction to the Theory of Statistics. Tata McGraw-Hill.
2. Goon, A. M., Gupta, M. K., & Gupta, B. D. (2001). An Outline of Statistical Theory (Volume 2). The world Press Pvt. Ltd.

Suggested Reference Books:

1. Rohatgi, V. K., & Saleh, A. M. E. (2015). *An introduction to probability and statistics*. (2nd.ed.) John Wiley & Sons.

2. Lehmann, E. L., & Romano, J. P. (2006). *Testing statistical hypotheses*. Springer Science & Business Media.

3. Lehmann, E. L., & Casella, G. (2006). *Theory of point estimation*. Springer Science & Business Media.

4. Zacks, S. (1971). *The theory of statistical inference.* John Wiley & Sons.

Suggested E-learning material

1. Statistical Inference; Platform: MITOPENCOURSEWARE https://ocw.mit.edu/index.htm

2. Statistical Inference; Platform: Coursera https://www.coursera.org

3. Statistical Inference: Platform: e-PG Pathshala https://epgp.inflibnet.ac.in

STAT 207L Statistical Inference and Quality Control Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: On the completion of this course, the students will be able to:

- Understand when and how to use various control charts such as X, R, and s charts.
- Effectively understand and determine the AOQ and AOQL plots.
- Understand when and how to use various non - parametric tests such as Sign   test, Run test, Median test etc.

1. Controls Charts:
   - X, R, and s charts
   - p and np charts for equal and unequal sample sizes.
   - c-chart.
   - Determination of AOQ & AOQL

2. Non Parametric Tests:
   - Sign Test
   - Run Test
   - Median Test

- Mann Whitney U Test
- Five problems on primary data

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus of papers I & II may be set in the practical examination.

(ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

(iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

V Semester/VI Semester

Discipline Electives

STAT 302 Sampling Techniques and Design of Experiments

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	6	0	0	6

Learning Outcomes: After the completion of the course, the students will be able to:,

- Understand the Simple and Stratified random sampling techniques.
- Understand the ratio estimation procedure.
- Apply ANOVA for one-way and two–way classification, fixed effect models with equal number of observations per cell.

Unit 1 Sample survey procedures, Role of sampling theory, Probability and non-probability sampling. Mean square error. Accuracy and precision of an Estimator. SRSWR and SRSWOR. Variance of the estimate of population mean and population total. Estimation of standard error for sample mean.Sampling for proportions and percentages (with/without replacement). Variance of sample estimate, estimated variances of these estimates.

Unit 2 Stratified Random Sampling: Estimate of Population mean and its variance.

Allocation of sample size: Proportional allocation and optimum allocation (with/without varying cost). Comparison of simple random sampling with proportional and optimum allocation. Estimation of the sample size.

Unit 3 Systematic Sampling-Estimation of variance of the systematic sample mean. Comparison of systematic Sampling with simple

random and stratified sampling. Estimation of the ratio and ratio estimates for population mean and population total. Approximate formula for variance and Bias of the ratio estimates.

Unit 4 Concept of Analysis of variance (i) One-way classification with equal/unequal observations per class. (ii) Two-way classification with one observation per cell. Fixed effect models of (i) and (ii) and the assumptions involved. Estimation of treatment effects, treatment differences and confidence limits for the same. Expectations of sum of squares, variances of the estimates.

Unit 5 Meaning of experiment, Experimental unit, Treatment, Field, Block, Experimental error, Precision, Uniformity trials, Principles of designs-replication, Randomization and Local Control, Efficiency of design choice of size and shape of plots and blocks. Completely Randomized design, Randomized Block design and Latin square Design-Analysis of these designs, standard error of treatment differences, comparison of their efficiencies.

Note: Use of Scientific calculator is permissible.

Text Books:

1. Sukhatme, P. V. & Sukhatme, B. V. (1970). *Sampling Theory of Survey with Applications*. (2nd ed.), Piyush Publication.

2. Goon, A. M., Gupta, M. K. & Gupta, B. D. (2001). *Fundamental of Statistics.* (Volume. II). The World Press pvt. ltd.

Reference Books:

1. Cochran, W. G. (1977). *Sampling Techniques*. (3rd ed.). Wiley Eastern Limited.

2. Singh, D. & Chaudhary, F. S. (2002). *Theory and Analysis of Sample survey Design*. New Age International Publisher.

3. Joshi, D. D. (2003). *Linear Estimation and Design of Experiments.* New Age International Publisher.

4. Das, M. N. & Giri, N. G. (2002). *Design and Analysis of Experiments*. New Age International Publisher.

Suggested E-learning material:

1. Sampling Theory, NPTEL. https://nptel.ac.in/courses/111104073/

2. Biostatistics and Design of Experiments, NPTEL, https://nptel.ac.in/courses/102106051/

3. Design of Experiments and sample Survey. ePATHSHALA. https://epgp.inflibnet.ac.in/ahl.php?csrno=34

STAT 302L Sampling Techniques and Design of Experiments Lab

Max. Marks : 100				
	L	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**4**	**2**

Learning Outcomes: After the completion of the course, the students will be able to:

- Learn the basic principles underlying survey design and estimation.
- Draw a random sample by using with and without replacement sampling technique in excel.
- Calculate the sampling mean and sampling variance in case of SRSWR and SRSWOR.
- Draw a random sample from stratified and systematic sampling and also to compare the efficiencies of these sampling techniques with respect to each other.
- Analyze the results of a designed experiment in order to conduct the appropriate statistical analysis of the data.
- Compare several means by using the concept of one way and two way ANOVA.
- Compare the three designs named CRD, RBD and LSD in terms of their efficiencies.

1. **Sample Surveys:**

    SRS Sampling: To draw a simple random sample (SRS) with and without replacements, to obtain an estimate of the population mean along with the estimate of their variances. To compare their efficiency of SRSWOR and SRSWR.

    To draw all the possible samples by SRS technique and then to show that expected value of the sample mean equals the population mean and to find the expected value of S in SRSWOR and in SRSWR.

    Stratified Sampling:

    Estimate the sample sizes by proportional allocation and Neymann's optimum allocation.

Estimate the mean of the population under the above scheme.

Calculation of the sampling variances.

Comparison of efficiencies of the allocation scheme amongst themselves as well as with SRS.

Systematic Sampling:

Systematic sampling and its comparison with SRSS and stratified sampling.

Estimation of mean and variance by ratio method of estimation.

2. **Analysis of variance and Design of Experiments:**

One way and two-way classifications.

Completely Randomised Design (CRD).

Randomised Block Design (RBD) and its efficiency with CRD.

Latin Square Design (LSD) and its efficiency with CRD and RBD.

Project Work:

The candidate is to write a report on some project work based on Primary or Secondary data on any one selected topic with the permission of the Head of the Department.

Note: (i) The above list is only for the guidance of the students. Any practical from the syllabus of papers I & II may be set in the practical examination.

(ii) Whenever it is feasible, students should be asked to collect the required data themselves to use it in their practicals.

(iii) Where it is feasible practical practice should be done through spreadsheet, package or programming.

STAT 301 Applied Statistics

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**6**	**0**	**0**	**6**

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand the concept of time series data and application in various fields.

- Identify principle sources of demographic data and assess their strengths and weaknesses.

- Understand the calculation and interpretation of the principal demographic measures, and standardize these measures for comparison and construct and interpret life tables.
- Understand the uses of index number with their construction methods.
- Understand the concept of demand and supply theory.
- Understand the concept of scaling of scores.

Unit 1 **Time series analysis:** Components of a time series, Additive and multiplicative models. Methods of determining trend and seasonal components.

Unit 2 **Vital Statistics:** Indices of mortality and fertility, Mortality- Crude and Standardized death rates. Fertility- Crude birth rate, general fertility rate, Gross and Net reproduction rates, Definition, evaluation and uses of above indices, Stable and stationary populations- concept, determination of the rate of increase in a stable populations, Life table: construction of life table from graduated rates of mortality and evaluation of probabilities of survival and death from a life table.

Unit 3 **Economic statistics:** Meaning and uses of Index Numbers, Problems in construction of Index Numbers, Prices and quantity indices, Fixed base and chain base Index numbers. Weighted and unweighted index numbers-Laspeyre's, Pasche's, Marshel-Edgeworth's and Fisher's ideal Index numbers, Time reversal, factor reversal and circular tests, Base shifting, splicing and deflating.

Construction of cost of living and wholesale price index numbers.

Unit 4 **Educational Statistics:** Statistics in Psychology and Education, Scaling of scores, Standard scores, Normalized scores, T scores, Reliability and validity of test scores, intelligence quotient.

Unit 5 **Demand Analysis:** Demand and supply, Law of Demand and Supply. Price elasticity of demand, Partial elasticity of demand. Engel's curve and Engel's law, Pareto's law of income distribution.

Note: Use of Scientific calculator is permissible.

Text Books:

1. Gupta, S. C., & Kapoor, V. K. (2000). Fundamentals of mathematical statistics. New Delhi, Sultan Chand & Sons. (for applications)

2. Goon, A.M., Gupta, M.K., & Dasgupta, B.*Fundamental of Statistics.* (Volume.2). The World Press Pvt. Ltd.

Reference Books:
1. Hooda R.P. Introduction to Statistics. (7th ed.). Macmillan India Ltd.
2. Croxton, F.E.& Cowden, Dudley J. (1955). Applied General Statistics. (2nd ed.). New York, Prentice-Hall.

STAT 301L Applied Statistics Lab

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After the completion of the course, the students will be able to:

- Find the trend and seasonal components in the given dataset and separate these components on excel.
- Calculate and interpret the basic demographic measures and compare the measure for two different populations.
- Construct the life table with the help of some given life table columns.
- Calculate the index numbers for different commodities.
- Scaling the scores, test the reliability of these scores and compute the IQ of any individual.

1. (i) Measurement of trend by method of moving averages and curve fitting by least squares.
    (ii) Measurement of seasonal fluctuations by-
        (a) Ratio to trend   (b) Ratio to moving averages
        (c) Link relative method.
2. Vital Statistics:
    (i) CDR, CBR, Age specific death rates, standardized with and death rates.
    (ii)   GFR, ASFR, TFR.
    (iii) Crude rate of natural increase GRR, NRR.
    (iv) Life table and finding out certain values with its help.

3. Economic Statistics:
    (i)   Laspeyre's, Pasche's and Fisher's Index numbers.
    (ii)   Fixed base and chain base index numbers.
    (iii) Wholesale price index numbers.
    (iv)   Cost of living index numbers.
4. Educational Statistics: Computation of different scores, reliability of test scores and IQ.

STAT 303 Financial Statistics

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand acquisition of financial data

- Describe financial data using distributions

- Find relation between two or more financial series

- Understand the concept of stochastic process

- Apply basic stochastic models in financial data.

Unit 1 Essential practical familiarization with financial data. Typical challenges with real financial data. Basics on data acquisition, manipulation, filtering, graphical representation and plotting.

Unit 2 Statistical distribution of returns. Moments of the distribution. Non-Normal distributions and fat-tails. Large fluctuations and tail risk. Stable distributions. Generalized extreme value distribution. Estimation methods to characterize the tails of the distributions. Calibration and validation. Applications to measures of risk.

Unit 3 Measures of dependency: linear and non-linear correlations. Lagged correlations and causality. Information theoretic perspective: mutual information, transfer entropy. Spurious correlations. Correlation filtering through networks. Calibration, validation and application issues.

Unit 4 Stochastic Process: Concept, types, properties. Discrete Stochastic Processes, Binomial processes, Gaussian Process. Random walk, General random walks, Geometric random walks, Binomial models with state dependent increments.

Unit 5 Stochastic Models in Finance: Discrete time process- binomial model with period one. Stochastic Models in Finance: Continuous time process- geometric Brownian motion.

Suggested Readings:

1. Franke, J., Hardle, W.K. And Hafner, C.M. (2011): Statistics of Financial Markets: An Introduction, 3rd Edition, Springer Publications.

2. Stanley L. S. (2012): A Course on Statistics for Finance, Chapman and Hall/CRC.

3. Casella G. & Berger R. L. (2002). *Statistical Inference*, Brooks/Coles.

4. Bouchaud, J.- P. & Potters, M. (2003). *Theory of Financial Risk and Derivative Pricing: from Statistical Physics to Risk Management*, Cambridge University Press.

5. Lehmann, E. L. & Romano, J. P. (2006). *Testing Statistical Hypotheses*, Springer, 2006.

Reference Books

1. Coles, S. (2001). *An Introduction to Statistical Modeling of Extreme Values*, Springer.

2. Gumbel, E. J. (2013). *Statistics of Extremes*, Echo Point Books & Media.

STAT 303L Financial Statistics Lab

	L	T	P	C
Max. Marks : 100				
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand the behavior of financial data through graphs
- Describe the nature of financial data
- Calculate risk through financial data
- Find relationship between financial series
- Model financial data using some simple stochastic models.

List of Practical (Using spreadsheet/ R)

1. Graphical representation of financial data

2. Fit non-normal distributions to financial data

3. Obtain characteristics of the distribution

4. Find measures of risk

5. Measure relationships between financial series.

6. Apply stochastic processes for a financial data

STAT 304 Health Statistics and Population Dynamics

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **6   0   0   6**

Learning Outcomes: On the completion of the course, the students will be able to:

- Understand different measures related to health statistic,

- Calculate morbidity measures,

- Identify principle sources of demographic data and assess their strengths and weaknesses.

- Discuss the demographic significance of age and sex structures and the implications of variations in age & sex structure.

- Construct and interpret life tables.

- Calculate and interpret of the principal demographic measures, and standardize these measures for comparison.

- Understand the components of population change, including the effects of changing birth, death and migration rates, and demonstrate their influences on age structure.

- Estimate and project the population by different methods.

Unit 1 Health statistics: Introduction, utilization of basic data, sources of health statistics, problems in the collection of sickness data, measurement of sickness, hospital statistics and the international classification of diseases, different measures: incidence rates, prevalence rate, attack rate, case fatality rate. Measures of accuracy or validity, sensitivity index, specificity index.

Unit 2 Sources of demographic data in India: census, vital events, registration, survey, extent of under registration, Population pyramids and its use. Population growth rates: arithmetic, geometric and exponential growth rates, population estimation and projection.

Unit 3 Mortality and its measures: Crude, direct and indirect standardization of death rates, age specific death rate, infant mortality rate, neo- natal mortality rate, definitions and their evaluation.

Fertility and its measures: CBR, ASBR, measures of reproduction: GFR, TFR,GRR, NRR, cohort fertility analysis.

Unit 4 Measures of migration crude, specific and standardized rates survival ratio and national growth rate method.

Urbanization - Growth and distribution of rural - urban population in developed and developing countries.

Unit 5 Life tables and their application: construction of complete and abridged life tables and their interrelationship, force of mortality, evaluation of probabilities of survival and death from life table.

Text Books

1. Rao, P.S.S.Sundar, & Richard, J. (2004). *An introduction to Biostatistics (A manual for students in health sciences)*, Prentice Hall of India, Pvt. Ltd.

2. Misra, B.D. (2004). *An introduction to the study of population,* South Asian Publishers Pvt. Ltd.

3. Ramkumar, R. (2006). *Technical Demography*. New Age International.

4. Pathak, K.B.& Ram, F. (2019). *Techniques of Demographic Analysis* (2nd. ed.). Himalaya Publishing House.

Reference Books

1. Keyfitz.N. (2013). *Applied Mathematical Demography*, New York: John Wiley.

2. Bhinde, A. A. & Kanitker, T. (2018). *Principles of Population Studies* (19th. ed.). Himalaya Publishing House.

Suggested E- Learning Material

1. Demographic data; Platform: National Family Health Survey, India http://rchiips.org

2. Population Studies; Platform; e-PG Pathshala https://epgp.inflibnet.ac.in

3. Demography ; Platform: University Library - The University of Adelaide

   https://www.adelaide.edu.au/library/

4. Demography;   Platform: MITOPENCOURSEWARE
   https://ocw.mit.edu/index.htm

STAT 304L Health Statistics and Population Dynamics Lab

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **0 0 4 2**

Learning Outcomes: On completion of the course, the students will be able to:

- Calculate various measures of morbidity and their accuracy
- Construct population pyramid and identify its features
- Estimate population growth rates and project for future
- Calculate measures of mortality and fertility for a given population
- Calculate simple measures of life table and analyze it.

List of Practicals

1. Measures of morbidity
2. Measures of accuracy or validity, sensitivity index, specificity index
3. Construction of population pyramid
4. Population growth rate
5. Measures based on mortality
6. Measures based based on fertility
7. Construction of Life table

Textile Designing (Weaving)

First Semester

TXTD 102 Weaving - I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1 Colour Theory

    (a) Definition of colour

    (b) Newton's theory of colour

    (c) Colour wheel

    (d) Classification of colour (Primary, Secondary, Tertiary)

    (e) Colour Harmonies

    (f) Properties of Colour (Hue, Value, Intensity)

    (g) Difference between Dyes, Pigments and Colours of solar spectrum.

Unit 2 (i) Classification of Textile fibers.

    (ii) General Properties of fibers.

    (iii) Identification of fibers.

        (a) Microscopic test

        (b) Burning test

        (c) Chemical test

Unit 3 Yarn Manufacturing from

    (A) Natural Fibers – Cotton, Silk & Wool.

    (B) Man made Fibers -Rayon, Nylon & Polyester.

Unit 4 (1) Introduction of Loom (Structure and its parts)

    (2) Motion of the Loom -

        (i) Primary Motions -

            (a) Shedding (b) Picking

            (c) Beating.

        (ii) Secondary Motions -

            (a) Take up Motion

                (3, 5, 7 Wheels)

            (b) Let-Off Motion

Unit 5 (1) Basic Weaves & its Variation

           (i) Plain Weave – Rib and Basket

           (ii) Twill Weave – Right hand & Left hand

           (iii) Satin Weaves– Satin & Sateen

Learning Outcomes:

Upon completion of the course, the students will be able to:

- Know the basics of color, its properties and attributes.
- Understand types of yarn and its origin.
- Know theoretical about the loom, parts of Loom, Loom Mechanism and Basic weaves.

Recommended Books:-

1. Corbman, Bernard P. (1983). *Textiles: fibres to fabrics*, McGraw Hill, New York
2. Blinow, I. & Beley, Shibabaw (1988) *Design of woven fabrics*, Mir Publication, Mascow
3. Yates, Marypaul (1996) *Textile: a handbook for designers*, W. W. Norton & Company, London
4. Flower, Lynda (1986) *Ideas and techniques for fabric design*, Longman. London
5. तन्त से वस्त्र : कार्बमार
6. वस्त्र विज्ञान एवं परिधान – डॉ. प्रमिला व
7. रूप प्रद कला के मल आधार – शर्मा. अग्रवार

TXTD 102L Weaving - I Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Practical 1: Study of Colour wheel, Primary colours, Secondary colours, Tertiary colours, Cool colours, Warm colours, Monochromatic colours, Analogous colours, Complimentary colours, polychromatic colours on paper.

Practical 2: Daree –Size (10"x12") Method- Basic weave

Practical 3: Asan – Size (10"x10") Method – Tapestry

Practical 4: Sketch Book with 50 sketches

Learning outcomes:

Upon completion of the course, the students will be able to:

- Apply the color its properties and attributes in their practical work.
- Work with different types of yarns.
- Work on loom using Basic weaves.

Recommended Books:-

1. Corbman, Bernard P. (1983). *Textiles: fibres to fabrics*, McGraw Hill, New York

2. Blinow, I and Beley, Shibabaw (1988) *Design of woven fabrics*, Mir Publication, Mascow

3. Yates, Marypaul (1996) *Textile: a handbook for designers*, W. W. Norton & Company, London

4. Flower, Lynda (1986) *Ideas and techniques for fabric design*, Longman. London

5. तन्त से वस्त्र : कार्बमान

6. वस्त्र विज्ञान एवं परिधान – डॉ. प्रॉ ला वर्म

7. रूप प्रद कला के मल आधार – शर्मा. अग्रवार

Third Semester

TXTD 203 Weaving - II

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1 (i) Yarn definition.

    (ii) Preparation of Yarn.

    (iii) Types of Yarn.

    (iv) Direction of Twist.

    (v) Effect of Twist on Cloth

Unit 2 Yarn calculation systems

    (i) Direct yarn counting System.

    (ii) Indirect yarn counting System.

    (iii) Universal yarn counting System

Unit 3 (i) Twisting and Spining.

(ii) Doubling

(iii) Winding

Unit 4 Advance weaves

(i) Pointed Twill,

(ii) Diamond Twill,

(iii) Huck -a- back,

(iv) Mock-Lino,

Unit 5 A. Healds –

    i. Necessity of Heald

    ii. Types of Heald

    iii. Primitive Heald

    iv. Wire Healds

    v. Count of Heald

    vi. Limitations of Heald

B. Reed –

    i. Necessity of Reed

    ii. Different types of Reed

    iii. Stock Port Reed

    iv. Count of Reed

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand yarns and its counting systems.
- Know about Twisting, Winding and Warping Methods.
- Acquire Knowledge of Advance fabric constructions.

Recommended Books:-

1. Thomson, Helen Fibres and fabrics of today.

2. Nisbet, Harry (2014) *Grammer of textile*, Abhishek Pub. New Delhi.

3. Blinow, I and Beley, Shibabaw (1988) *Design of woven fabrics*, Mir Publication, Mascow.

4. Fannin, Allen (1979) *Handloom weaving technology*, Van Nostrand reinhold, New York

TXTD 203L Weaving - II Lab

Max.Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Practical 1   Dress Material by Basic weaves method

Practical 2   Carpet by pile Method

Practical 3   Stole Size (6"x 80")

Practical 4   Sketch Book with 50 sketches

Learning Outcomes: After the completion of the course, the students will be able to:

- Work with types of yarns by using yarn counting system for their work.
- Handle different types of yarns.
- Develop different types of fabrics by using Advance Weaves.

Recommended Books:-

1. Thomson, Helen Fibres and fabrics of today.
2. Nisbet, Harry (2014) *Grammer of textile*, Abhishek Pub. New Delhi.
3. Blinow, I and Beley, Shibabaw (1988) *Design of woven fabrics*, Mir Publication, Mascow.

   Fannin, Allen (1979) *Handloom weaving technology*, Van Nostrand reinhold, New York

Fourth Semester

TXTD 204 Weaving - III

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1   (i)   Old methods of Weaving

       (ii)   Looms- Types

       (A)   Handloom-

           i)   Types and Classification

           ii)   Vertical Loom-Carpet Loom

           iii)   Horizontal Loom-Frame Loom, Pit Loom

              Detailed study of its important part with Suitable illustration.

   (B) Power Loom (Introduction brief)

      (I)   Shuttle loom-Draw Box

      (II) Shuttle less loom

          (i)   Rapeir

          (ii)   Air jet

          (iii) Water jet

          (iv) Projectile

Unit 2 (A) Slay –

     -   Bottom Slay

     -   Swinging Slay

    Detailed study of its important part with Suitable illustration.

  (B) Shuttle-

     -   Through Shuttle

     -   Fly Shuttle

Unit 3 Variation of Twill Weave

  (i)   Fancy Twill

  (ii) Angle of Twill

  (iii) Curved Twill

Unit 4 Variation of the weaves

  (i)   Honey-comb

  (iii) Broken Twill

  (iv) Herring bone Twill

Unit 5 (a) Defect of the Cloth

  (b) Rectification of the Cloth

  (c) Count of the Cloth

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand Basics of weaving.
- Understand Weaving Mechanism.
- Understand types of Advance weaves.

Recommended Books:-

1. Thomson, Helen Fibres and fabrics of today
2. Fannin, Allen (1979) *Handloom weaving technology*, Van Nostrand reinhold, New York
3. Oxtoby, Eric (1987) *Spun yarn technology*, Butterworth,London
4. Murphy, W. S. (2000) *Practical guide to spinning*, Abhishek, Chandigarh
5. Ormeord, A. (2004) *Modern preparation and weaving machinery*, Woodhead, Cambridge
6. Grosicki, Z. (2004) *Watson's textile design and colour*. Woodhead Publication, Cambridge

TXTD 204L Weaving - III Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Practical: 1. Make a Fabric sample with combination of the Basic weaves (size 8"x 8")

Practical: 2. Muffler – (size 6" x 80")

Practical: 3. Furnishing- with Twill variation (8"x8")

Practical: 4. Sketch Book with 50 sketches.

Learning Outcomes: After the completion of the course, the students will be able to:

- Work with different types of Weaving Mechanisms.
- Construct fabric by using Basic and Advance methods of weaving.

Recommended Books:-

1. Thomson, Helen Fibres and fabrics of today
2. Fannin, Allen (1979) *Handloom weaving technology*, Van Nostrand reinhold, New York
3. Oxtoby, Eric (1987) *Spun yarn technology*, Butterworth,London
4. Murphy, W. S. (2000) *Practical guide to spinning*, Abhishek, Chandigarh
5. Ormeord, A. (2004) *Modern preparation and weaving machinery*, Woodhead, Cambridge
6. Grosicki, Z. (2004) *Watson's textile design and colour*. Woodhead Publication, Cambridge

Fifth Semester
Textile Designing (Weaving)
Discipline Elective-I

TXTD 305 Weaving IV

Max. Marks : 100
(CA: 40 ESA: 60)

L	T	P	C
4	0	0	4

Unit 1 Method of Cloth Analysis

Unit 2 Cloth Calculation
  (i) Tape Length
  (ii) Cut Length
  (iii) Weight of warp
  (iv) Weight of weft
  (v) Weight of cloth

Unit 3 (a) Bed - Ford – Cord
  (b) Barley-Corn & Hopsek
  (c) Diaper and Damask
  (d) Double Cloth – Plain
  (e) Extra Warp & Weft

Unit 4 Dobby Definition and Scope
  Handloom Liver Dobby (Horizontal)
  (i) Barrel Dobby
  (ii) Latice Dobby
  (iii) Hardekar Dobby

Unit 5 Jacquard Definition & Scope
  (i) Single Lift Single Cylinder
  (ii) Double Lift Double Cylinder

Learning Outcomes: After the completion of the course, the students will be able to:
- Understand Advance Weaving Mechanism.
- Understand Cloth calculations and Advance weaves.
- Understand Method of Cloth Analysis.

Recommended Books:-
  1. Grosicki, Z. (2004) *Watson's textile design and colour*. Woodhead Publication, Cambridge

2. Watson, William (1989) *Advanced textile design*, Butterworth. London
3. Gupta, Sen R. (1971) *Weaving Calculations*, D. B. Taraporevala, Bombay
4. Nisbet, Harry (2014) *Grammer of textile*, Abhishek Pub. New Delhi
5. Blinow, I and Beley, Shibabaw (1988) *Design of woven fabrics*, Mir Publication, Mascow
6. Oelsner, G. H. *Handbook of weaves*.
7. Fritz, Anne (1986) *Consumer textile*, Oxford University Press. Oxford
8. Fannin, Allen (1979) *Handloom weaving technology*, Van Nostrand Reinhold. New York

TXTD 303L Weaving - IV Lab

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Practical 1. Handkerchief with Extra Warp and Extra Weft.
Practical 2 Suiting with Bed-Ford Cord.
Practical 3. Cloth Analysis -5 Samples.
Practical4. Sketch book with 50 sketches.

Learning Outcomes: After the completion of the course, the students will be able to:

- Work with Advance Weaving Mechanism.
- Estimate the cost of fabrics.
- Analyze the fabric for reproduction.

Recommended Books:-

1. Grosicki, Z. (2004) *Watson's textile design and colour*. Woodhead Publication, Cambridge
2. Watson, William (1989) *Advanced textile design*, Butterworth. London
3. Gupta, Sen R. (1971) *Weaving Calculations*, D. B. Taraporevala, Bombay
4. Nisbet, Harry (2014) *Grammer of textile*, Abhishek Pub. New Delhi
5. Blinow, I and Beley, Shibabaw (1988) *Design of woven fabrics*, Mir Publication, Mascow
6. Oelsner, G. H. *Handbook of weaves*.

7. Fritz, Anne (1986) *Consumer textile*, Oxford University Press. Oxford

8. Fannin, Allen (1979) *Handloom weaving technology*, Van Nostrand Reinhold. New York

Sixth Semester
Textile Designing (Weaving)
Discipline Elective-II

TXTD 304 Weaving CATD

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1 Basics of Computer

- Overview of the Computer System (Basic components & their functions)
- Computer Characteristics & its Applications.
- Computer Classification (Super, Micro, Personal Computers and Laptops)
- Computer Software - System & Application Software
- Computer Hardware - CPU, Input Devices & Output Devices

Unit 2 Basics of Hardware & Software

- Storage Devices - Primary & Secondary Storages Devices
- Compilers, Assemblers, and Interpreters
- Understanding Operating System
  - Need & Importance
  - User Interfaces
  - Utility Software
- Overview of Windows
- Overview of Word Processors (MS-Word)
- Overview of Spreadsheet (MS-Excel)
- Overview of Presentation (MS-Power Point)
- Network Basic & Internet

Unit 3 Color Theory based on Computers

- RGB color Model

- Monitor Resolution
- Tools for Multimedia Data
  - Hardware Devices-Scanner, Digital Cameras & Microphone.
  - Software Devices- Flash, Photoshop
- Graphics/Image File Formats
  - Pixels
  - Bit-Map
  - Monochrome Bit-Map Image
  - Grayscale Bit-Map Image
  - 24 Bit Color Image

Unit 4 Using the Tool bar in the image screen.

- Creation of weave
- Basic Pathway for Making New Design
  - (a) Editing a Peg-Plan
  - (b) Editing the Draft
  - (c) Editing the Warp and Weft patterns.
  - (d) Making the Yarns and the yarn Libraries.
  - (e) Weaving and Printing Designs.
  - (f) Printing the Master Cards.

Unit 5
- Scope and importance of Reproduction through Print
- Economics of Computer Aided Textile Design Technology
- Limitations of CATD

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand Basics of computer, Hardware and Software.
- Understand Computers Color Theory.
- Understand Application of Woven Design by using Software.

TXTD 304L Weaving CATD Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Practical:-1 Prepare 15 CATD designsb for each: - (i) Furnishing (ii) Dress Material

Total print out 6 (3 for each)

Practical:-2 Application of Ms-Word, Excel and Power-Point

Practical:-3 Sketch book with 50 sketches

Learning Outcomes: After the completion of the course, the students will be able to:

- Apply Computer Color Theory in various designs by using Sofware.
- Develop new Woven designs by using given Software.

Textille Designing (Printing)

Second Semester

TXTD 101 Dyeing and Printing - I

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**4**	**0**	**0**	**4**

Unit 1

1. Introduction of Textile Designing Aim and scope

2. (a) Elements of design (Line, Form, Colour, Tone, Texture, Space)

   (b) Principle of Design (Unity, Harmony, Balance, Dominance, Rhythm, Proportion)

3. Definition, Characteristics and Origin of various Motifs:

   (i)Traditional (ii) Modern (iii) Geometrical (iv) Natural (v) Figurative (iv)Abstract (v) Folk (vi) Tribal (vii) Stylized

4. Representation of Repeats and its application on various cloths with different purpose:

   Plain, Vertical, Horizontal, Twill, Mirror and Half step.

Unit 2 (1) Kinds of Fabrics

   (a) Simple

   (b) Compound

   (2) Classification of fabrics.

   (a) Woven - (i) Woven (ii) Pile

   (b) Unwoven - (i) Felted (ii) Knitted (iii) Lace

Unit 3 (a) General Theory of Dyeing: The role of following

(i) Dye molecule,

(ii) Fiber, (iii) Water, (iv) Heat,

(v) High-temperature,

(vi) Electrolytic,

(vii) Dyeing auxiliaries

(b) Chromophores and Auxochromes

Unit 4 Classification of dyes:

(i) Natural-Vegetable, Animal, Mineral

(ii) Synthetic-Direct Dyes, Basic Dyes, Acid Dyes, Azoic Dyes, Mordant Dyes, Mineral Dyes, Vat Dyes, Dispersed Dyes, Aniline Dyes, Reactive Dyes, Sulphur Dyes, Pigment Dyes.

Unit 5 (a) Kinds of Dyeing: (i) Simple Dyeing (ii) Cross Dyeing (iii) Resist Dyeing

(b) Stencil Printing

(c) Tie & Dye

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand the role of Textile Designing in Textile Industries.

- Understand the Elements and principles of Design, types of Motifs and types of Repeats which heps in drawing.

- Know various fabric finishes.

Recommended Books:-

1. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

2. Gokhale, S. V. (1981) *Cotton piece dyeing*, Ahmedabad textile Industry, Ahmedabad.

3. Stuart and Robinson, Patricia (1982) *Beginner's guide to fabric dyeing and printing*, Newnes Technical Books, London

4. Shenai, V. A. (1991). *Chemistry of organic chemicals,* Sevak Publication, Bombay.

5. Gentille, Terry A. (1982). *Printed textile*, Prentice Hall, NJ

6. Yates, Marypaul (1996) *Textile: a handbook for designers*, W. W. Norton & Company, London

7. Flower, Lynda (1986) *Ideas and techniques for fabric design*, Longman. London

TXTD 101L Dyeing and Printing - I Lab

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	8	4

Practical-1: Prepare 4 Paper sheets on each motif : (i)Traditional (ii) Modern (iii) Geometrical (iv) Natural (v) Figurative (iv) Abstract (v) Folk (vi) Tribal (vii) Stylized

Practical-2: Paper work and practical work for set of 2 Cushions by Stencil Method with Pigment or Fabric colour (Size -16" x 16")

Practical-3: Different Patterns on Hankies by Tie & Dye method with Direct dyes (20 Hankies, Size- 10"x10")

Practical-4: Sketch Book with 50 sketches

Learning Outcomes: After the completion of the course, the students will be able to:

- Develop new concepts for design on the basis of given brief.

- Explore new designs by following Design Elements and Principles.

- Understand and apply different finishes on fabric.

Recommended Books:-

1. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

2. Gokhale, S. V. (1981) *Cotton piece dyeing*, Ahmedabad textile Industry, Ahmedabad.

3. Stuart and Robinson, Patricia (1982) *Beginner's guide to fabric dyeing and printing*, Newnes Technical Books, London

4. Shenai, V. A. (1991). *Chemistry of organic chemicals,* Sevak Publication, Bombay.

5. Gentille, Terry A. (1982). *Printed textile*, Prentice Hall, NJ

6. Yates, Marypaul (1996) *Textile: a handbook for designers*, W. W. Norton & Company, London

7. Flower, Lynda (1986) *Ideas and techniques for fabric design*, Longman. London

Third Semester

TXTD 201 Dyeing and Printing - II

Max. Marks : 100

(CA: 40 + ESA: 60)

L	T	P	C
4	0	0	4

Unit 1 (A) Dyeing Machinery

    (i) Dyeing of Textile goods in various forms and machinery employed.

    (ii) Requirements of Dyeing machines.

    (iii) Dyeing of loose fibers

  (B) Yarn Dyeing

    (i) Hank Dyeing machine.

    (ii) Cheese Dyeing machine.

    (iii) Beam Dyeing machine.

Unit 2 Cloth Dyeing

    (i) Jigger Dyeing machine.

    (ii) Winch Dyeing machine.

    (iii) Padding Mangle cloth dyeing machine.

Unit 3 (i) Classification of Natural Dyes

    (ii) Source of Dyes

    (iii) Types of Mordant

    (iv) Mordanting and Dyeing

(v) Dyeing of Cotton with following Natural dyes

(a) Indigo (b) Manjistha (c) Ratanjot (d) Harshingar

(e) Heena/Mehendi

Unit 4 Methods of Printing

(i) Block printing.

(ii) Screen printing with enamel method.

(iii) Roller Printing.

Unit 5 Brief study of Fabric finishes:

1   Basic finish

(a) De-Sizing

(b) Singeing

(c) Scouring

(d) Bleaching

(e) Optical bleaching

(f) Mercerizing

(g) Calendaring

(h) Shrinking

(i) Tantering

(j) Anti-Shrink

2.   Texturing finish

(a) Napping

(b) Flocking

(c) Moireing

(d) Embossing

(e) Schrenerizing

(f) Creping

(g) Cireing

(h) Glazing

3. Functional finish

   (a) Water- Proofing

   (b) Fire- Proofing

   (c) Moth- Proofing

   (d) Mildew-Proofing

   (e) Antistatic

   (f) Heat - Setting

   (g) Slip-Resistant

   (h) Crease- Resistance

   (i) Soil release

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand working of Dyeing Machines.

- Understand Natural Dyes and its properties.

- Understand Printing methods and finishing process.

Recommended Books:-

1. Hall, A. J. (1975) *The standard handbook of textile*, Newner Butler Worths, London

2. Hall, A. J. (1963) *A student's text books of textile science*, Allman, London

3. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

4. Kale, D. G. (1976) *Principal of cotton printing*, Mahajan Brothers, Ahmedabad.

5. Marsh, J. T. (1979) *Textile science an introductory manual*, B. I. Publication. Bombay

6. Shenai, V. A. (1991). Vol. VI *Technology of dyeing*, Sevak Publication, Bombay.

7. Shenai, V. A. (1991).Vol. V *Chemistry of dyes and principles of dyeing*, Sevak Publication, Bombay.

TXTD 201L Dyeing and Printing - II Lab

Max. Marks : 100			**L**	**T**	**P**	**C**

Max. Marks : 100　　　　　　　　　　　　　　**L　T　P　C**

(CA: 40 + ESA: 60)　　　　　　　　　　　　　**0　0　8　4**

Practical-1 Dyeing of Cotton five Vegetable dyes and two different Mordant (Size- 10"x10").

Practical-2 Block printing on single bedsheet with Pigment dyes (Size- 60"x90").

Practical-3 Screen printing by Enamel method for Scarf. (Size: Square between 16” to 22”) (Material-Cotton)

Practical-4 Sketch book with 50 sketches.

Learning Outcomes: After the completion of the course, the students will be able to:

- Know how to work with Dyeing Machines.

- Know how to apply a dye on different fabrics.

- Apply Printing methods on different fabrics.

Recommended Books:-

1. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

2. Kale, D. G. (1976) *Principal of cotton printing*, Mahajan Brothers, Ahmedabad.

3. Shenai, V. A. (1991). Vol. VI *Technology of dyeing*, Sevak Publication, Bombay.

4. Shenai, V. A. (1991).Vol. V *Chemistry of dyes and principles of dyeing*, Sevak Publication, Bombay.

Fourth Semester

TXTD 202 Dyeing and Printing – III

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1   General Theory of Printing (The role of Fiber, Dye molecule, Water, Thickener and Auxiliaries)

Unit 2   Materials used in printing paste.

  (i)   Thickening Agents.

  (ii) Acid and Alkali

  (iii) Oxidizing and reducing Agents

  (iv) Mordant

  (v)   Auxiliaries

Unit 3   Steps/Procedures of Printing

  (i)   Preparation of the Printing paste

  (ii) Printing.

  (iii) Drying after printing

  (iv) Dyestuff fixation.

  (v)   Final treatment or after treatment.

Unit 4   Styles of Printing

  (i)   Direct style

  (ii) Discharge Style

  (iii) Resist style

Unit 5   (A) Dyeing of Cotton and Jute with following Dye's.

    (i) Direct Dyes (ii) Azoic Dyes   (iii) Vat Dyes

    (iv) Reactive   Dyes (v) Sulphur Dyes.

  (B) Dyeing of Silk and Wool with following dyes.

    (i) Acid Dyes   (ii) Basic Dyes

Learning Outcomes: After the completion of the course, the students will be able to:

- Explore different Printing materials, printing process according to its properties.

- Use various Printing styles for their further work.

Recommended Books:-

1. Hall, A. J. (1975) *The standard handbook of textile*, Newner Butler Worths, London

2. Hall, A. J. (1963) *A student's text books of textile science*, Allman, London

3. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

4. Kale, D. G. (1976) *Principal of cotton printing, Mahajan Brothers*, Ahmedabad.

5. Marsh, J. T. (1979) *Textile science an introductory manual*, B. I. Publication. Bombay

6. Shenai, V. A. (1991). Vol. VI *Technology of dyeing*, Sevak Publication, Bombay.

7. Shenai, V. A. (1991).Vol. V *Chemistry of dyes and principles of dyeing*, Sevak Publication, Bombay.

8. Shenai, V. A. (1991). Vol. IV-V *Technology of printing*, Sevak Publication, Bombay.

9. Clarke, W. (1973). *An Introduction to textile printing*. Newnes-Butterworth, London

TXTD 202L Dyeing and Printing -III Lab

		L	T	P	C
Max. Marks : 100					
(CA: 40 + ESA: 60)		0	0	8	4

Practical-1: Saree with Tie & Dye and value addition.

Practical-2: Batik for wall hanging with Napthol Dyes. (2-3 Colours, Size-20"×36", Material-Cotton)

Practical-3: Dyeing with Acid Dyes on Silk and Wool. (Sample size 10" x 10" five sample each).

Practical-4: Sketch Book with 50 sketches.

Learning Outcomes: After the completion of the course, the students will be able to:

- Apply different Printing materials on fabric by using Printing processes.
- Make screen and apply this method on fabrics.

Recommended Books:-

1. Hall, A. J. (1975) *The standard handbook of textile*, Newner Butler Worths, London

2. Hall, A. J. (1963) *A student's text books of textile science*, Allman, London

3. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

4. Kale, D. G. (1976) *Principal of cotton printing, Mahajan Brothers*, Ahmedabad.

5. Marsh, J. T. (1979) *Textile science an introductory manual*, B. I. Publication. Bombay

6. Shenai, V. A. (1991). Vol. VI *Technology of dyeing*, Sevak Publication, Bombay.

7. Shenai, V. A. (1991).Vol. V *Chemistry of dyes and principles of dyeing*, Sevak Publication, Bombay.

8. Shenai, V. A. (1991). Vol. IV-V *Technology of printing*, Sevak Publication, Bombay.

9. Clarke, W. (1973). *An Introduction to textile printing*. Newnes-Butterworth, London

Fifth Semester

Textile Designing (Printing)

Discipline Elective-I

TXTD 301 Dyeing and Printing - IV

Max. Marks : 100   **L T P C**
(CA: 40 + ESA: 60)   **4 0 0 4**

Unit 1 Dyeing of Acetate Rayon, Nylon, Polyester, and Acrylics with Disperse dyes.

Unit 2 Screen Printing:

    (i)   Preparation of Screen

  (ii) Flat bed screen-Types of Flat bed

Unit 3 Rotary Screen Printing:

  (i) Work and structure of Rotary Screen Printing Machine

  (ii) Preparations of Rotary Screen

  (iii) Advantage and disadvantage of Rotary Screen Printing Machine

Unit 4 Study of advance methods of printing techniques:

  (i) Transfer Printing

  (ii) Digital Printing

Unit 5 Rajasthani Traditional Textiles:

  (i) Bandhej

  (ii) Sanganeri Printing

  (iii) Dabu Printing

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand Natural fibers, Synthetic dyes and dying processes.
- Understand Advance Printing Methods and Digital Printing.
- Get Knowledge of Traditional Rajasthani Textiles.

Recommended books:-

1. Sarabhai, Mrinalini (1988) *Patola and resist dyed fabric of India*, Mapin Pub. Ahmedbadad.

2. कोठारी, गुलाब (1995) राजस्थान की बहुरंगी वस्त्र परम्परा, जयपुर पब्लिकेशन डिविजन, जयपुर

3. Gillow, John and Barnard, Nicholas (1993) *Traditional Indian textiles*, Thames and Hudson. London

4. Hall, A. J. (1975) *The standard handbook of textile*, Newner Butler Worths, London

5. Hall, A. J. (1963) *A student's text books of textile science*, Allman, London

6. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

7. Kale, D. G. (1976) *Principal of cotton printing*, Mahajan Brothers, Ahmedabad.

8. Marsh, J. T. (1979) *Textile science an introductory manual*, B. I. Publication. Bombay.

TXTD 301L Dyeing and Printing - IV Lab

Max. Marks :100   **L   T   P   C**
(CA: 40 + ESA: 60)   **0   0   8   4**

Practical: 1. Screen Printing by Photographic method with Pigment Colours for Curtain (Size- As per requirements, Material- Cotton)

Practical: 2. Dabu Printing on Mats (Size-12"x15", Material-Cotton).

Practical: 3. Duppatta with Bandhej (Material-Cotton & Silk).

Practical: 4. Sketch book with 50 sketches.

Learning Outcomes: After the completion of the course, the students will be able to:

- Apply Synthetic dyes with dying processes.

- Apply Advance Printing Methods on fabrics.

- Work with Traditional Rajasthani Textiles.

Recommended books:-

1. Sarabhai, Mrinalini (1988) *Patola and resist dyed fabric of India*, Mapin Pub. Ahmedbadad.

2. कोठारी, गुलाब (1995) राजस्थान की बहुरंगी वस्त्र परम्परा, जयपुर पब्लिकेशन डिविजन, जयपुर

3. Gillow, John and Barnard, Nicholas (1993) *Traditional Indian textiles*, Thames and Hudson. London

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5. Hall, A. J. (1963) *A student's text books of textile science*, Allman, London

6. Gohl, E. P. G. and Vilensky, L. D. (1983). *Textile science*, Longman Cheshire House, Melbourne

7. Kale, D. G. (1976) *Principal of cotton printing*, Mahajan Brothers, Ahmedabad.

8. Marsh, J. T. (1979) *Textile science an introductory manual*, B. I. Publication. Bombay

Sixth Semester

Textile Designing (Printing)

Discipline Electives – II

TXTD 302 Dyeing and Printing CATD

Max. Marks : 100   **L   T   P   C**
(CA: 40 + ESA: 60)   **4   0   0   4**

Unit 1   Basics of Computer

- Overview of the Computer System (Basic components & their functions)
- Computer Characteristics & its Applications.
- Computer Classification (Super, Mini, Personal Computers and Laptops)
- Computer Software - System & Application Software
- Computer Hardware - CPU, Input Devices & Output Devices

Unit 2   Basics of Hardware & Software

- Storage Devices - Primary& Secondary Storages Devices
- Compilers, Assemblers, and Interpreters
- Understanding Operating System
  — Need & Importance
  — User Interfaces
  — Utility Software
- Overview of Windows
- Overview of Word Processors (MS-Word)
- Overview of Spreadsheet (MS-Excel)
- Overview of Presentation (MS-Power Point)
- Network Basic & Internet

Unit 3   Color Theory based on Computers

- RGB color Model
- Monitor Resolution

- Tools for Multimedia Data
  - — Hardware Devices-Scanner, Digital Cameras & Microphone.
  - — Software Devices- Flash, Photoshop
- Graphics/Image File Formats
  - — Pixels
  - — Bit-Map
  - — Monochrome Bit-Map Image
  - — Greyscale Bit-Map Image
  - — 24 Bit Color Image
  - — 8-Bit Color Image
- Standard System Independent Formats.
  - — GIF
  - — JPEG
  - — TIFF
- System Dependent Formats
  - — BMP
  - — PAINT

Unit 4 Creation of design with the help of Globle Texstyler/Adobe Photoshop

- Source of Design for Scanning:-
  - — Artist Sketch
  - — Printed Cloth
- Functions of Tools.
- Resizing and Resampling
- Repeat setting
- Retouching/Editing
- Colour Separation/Concept of Layer, Channels & Path
- Over lapping, Creation of Design

- Printout

Unit 5 • Scope and importance of Reproduction through Print.

- Economics of Computer Aided Textile Design Technology.

- Limitations of CATD.

Learning Outcomes: After the completion of the course, the students will be able to:

- Understand Basics of computer, Hardware and Software.

- Understand Computers Color Theory.

- Understand Application of Print Design by using Software before sampling

TXTD 302L Dyeing and Printing CATD Lab

Max. Marks : 100	**L**	**T**	**P**	**C**
(CA: 40 + ESA: 60)	**0**	**0**	**8**	**4**

Practical:-Prepare 15 Designs for each:-

(i) Furnishing(ii) Dress Material

Total Printout 6 (3 for each)

Practical:-2 Application of Ms-Word, Excel and Power-Point

Practical:-3 Sketch Book with 50 sketches.

Learning Outcomes: After the completion of the course, the students will be able to:

- Handle computer with its different application.

- Apply Computer Color Theory in various designs by using Software.

- Develop new Print designs by using given Software.

Discipline Elective

Brief of Discipline Elective:

- To finalize design a design based on the information gathered during Course.

- To develop ideas/Innovations possible in existing product line.

- The finalize a domain of interest.

- To gather all necessary information about the selected domain Industry, market, existing product/service categories.

- To conceptualize the ideas on paper/computer and a prototype if possible.

Learning Outcomes: After the completion of the course, the students will be able to:

- Develop the fnal concept (soft-copy) based on the selected design brief.

- Develop a product range/prototype based on the finalized concept.

- Select market and product knowledge to the student related to the interest area.

- Conceptualize the ideas in form of at-least 40 sketches (both hand skills & on softwares).